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AND HORTICULTURAL REGISTER.

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AGRICULTURAL.

From the Third Annual Report on the Geology of Maine.

MANURE FROM PEAT AND LIME.

Peat also occurs abundantly in the same meadow, and by a little chemical skill may be converted into an excellent manure by means of a mixture of lime and a little barn-yard manure, or any animal matter. Thus three or four cords of the peat mixed with one cord of animal manure, and treated with a cask or two of slaked lime, will make a compost superior in value to five cords of the best stable manure alone. They ought to be placed in alternating layers, thus:

PEAT,

LIME,

ANIMAL MANURE,

PEAT,

&c.

The whole forming a regular compost heap. The chemical reactions which follow are chiefly thus:

The lime extricates a large quantity of gaseous ammonia from the animal matter, which is absorbed by and enters into combination with the peat, and is thus retained ready for use in the state of ulmate or geat of ammonia—(a most powerful manure)—and the lime becomes completely carbonated or air slaked by the carbonic acid given out during fermentation, and in this state is a proper and permanent ameliorator of the soil. The peat is converted into a powder and soluble pulp, and becomes more suitable for the nutriment of plants. While if lime and animal matter was used in excess, we shall have also a considerable quantity of carbonate of ammonia in the peat, a well known and powerful saline manure.

In case the soil is sandy, the clay marl, neutralized with lime, is the most proper amendment for it, and such is generally the condition of the fields in Saco, so that by a proper use of this marl, the happiest effects may be realized by the farmers in that town.

I could quote other instances of the kind, but the above fully illustrates my meaning, and will show how favorable an influence scientific knowledge would exert in agriculture, were it more generally appreciated.

The principles which I have laid down have been adopted by several distinguished farmers of Massachusetts, and their experience most fully corroborates the truth of the theory inculcated.

I need but appeal to the experience of one of our most intelligent farmers in Massachusetts, Elias Phinney, Esq., of Lexington, to demonstrate the correctness of the rules we have laid down, with regard to the use of peat for compost manure, or to the beautiful farm of Benjamin Bussey, Esq., of Jamaica Plain, Roxbury, where similar results have been obtained.

Lexington, January 30, 1830.

Dr. Charles T. Jackson,

Dear Sir—I herewith send you a sample of my peat. I am very desirous of availing myself of the benefit to be derived from a chemical analysis of the same, which you kindly offered to make.

A more intimate knowledge of the nature and properties of peat, which can be obtained only by a scientific examination of its constituent parts, would enable farmers more justly to appreciate this valuable species of land. It is from a want of this knowledge, that our extensive tracts of low meadow and swamp lands have hitherto been esteemed of little or no value. Allow me to say, sir, that I know of no way in which you could render a more essential service to the public more especially to farmers, than by enabling them to convert their unproductive and unsightly bogs and morasses into luxuriant fields and sources of wealth. I consider my peat grounds by far the most valuable part of my farm—more valuable than my wood lots for fuel, and more than double the value of an equal number of acres of my uplands, for the purposes of cultivation.

In addition to these, they furnish an inexhaustible supply of the most essential ingredient for the manure heap. A statement of the uses to which I have appropriated peat lands, and my management of them, though very imperfect, may serve to give you a partial conception of their value and uses, and at the same time enable you to see how important it is that the farming community should have more information on this subject.

In the first place they are valuable for fuel. I have for twenty years past resorted to my peat meadows for fuel. These, with the prunings of my fruit trees, and the brush from my uncleared lands, have given me my whole supply. The prunings and brush are bound in bundles, and housed, and with the help of a small bundle of these faggots, and peat, a quick and durable fire is made. It gives a summer-like atmosphere, and lights a room better than a wood fire. The smoke from peat has no irritating effect upon the eyes, and does not in the slightest degree obstruct respiration, like the smoke of wood; and it has none of that drying, unpleasant effect of a coal fire. The ashes of peat are, to be sure, more abundant, but not more troublesome, and are less injurious to the furniture of a room, than the ashes of coal.

The best peat is found in meadows, which have for many years been destitute of trees, and brush, and well drained, and where the surface has become so dry, and the accumulation of decayed vegetable matter so great, that but little grass or herbage of any description is seen upon the surface. If the meadows are suffered to remain in a wet and miry condition, the wild grasses and coarse herbage will continue to grow, and the peat be of a light and chaffy texture, filled with undecayed fibrous roots. By draining they become hard, and the peat becomes compact and solid, and the cutting out and carrying off greatly facilitated. A rod square, cut two spittings deep, each spitting of the length of eighteen inches, will give three cords when dried. It may be cut from May to September. If the weather in autumn be very dry, the best time for cutting will be from the middle of August to the middle of September. If cut the latter part of summer, or early in autumn, it dries more gradually, and is not so liable to crack and crumble, as when cut early in summer. The pieces are taken out with an instrument made for the purpose, from two to three inches square; and if of good quality will shrink about one-half in drying. It is considered a day's work for a man, a boy and a horse, to cut out and spread a rod square. The man cuts it out, and lays it upon a light kind of drag, made for the purpose, and it is drawn off by the horse, and spread by the boy as thick as the pieces can lay singly. After becoming dry enough to handle without breaking, it is made into piles, cob-house fashion, of from twelve to twenty pieces in a pile. It will then require about four weeks of dry weather to render it fit to be housed for use. The top or turf is thrown back into the pits from which the peat is taken; and if well leveled, and the ground drained, it will, after the first year, give a large crop of foul meadow, or other lowland grass. Peat taken from land which has been many years drained, when dried, is nearly as heavy as oak wood, and bears about the same price in the market. The value of peat and swamp lands for tillage, is now pretty well known and acknowledged. Some years since, I occasionally sold to my neighbors a few rods of my peat land, yearly, to be cut out for fuel, at three dollars per rod, being at the rate of four hundred and eighty dollars per acre; but finding this sum to be less than its value for cultivation, especially when laid to grass, I have declined making further sales at that price. I have raised upon my reclaimed meadows seventyfive bushels of corn, five hundred bushels of potatoes, or from four to five tons of the best hay, at a first and second cutting, to the acre, at a less expense of labor and manure, than would be required to produce half this crop upon uplands. To render these lands productive, they should be thoroughly drained, by digging a ditch around the margin of the meadow, so as to cut off the springs and receive the water that is continually flowing in from the surrounding uplands. If the meadow be wide, a ditch through the centre may be necessary, but this will be of no use without the border ditches. This being thoroughly done, and the surplus water all drawn off, the next step is to exterminate the wild grasses and herbage of every kind, that grow upon the surface. To effect this, the method heretofore generally, and now by some pursued, is to cover with gravel or sand, top-dress with manure, sow the grass seed, and then rake or bush it over. This, for the first year or two, will give a good crop of hay; but after this I have invariably found, that the more coarse and hardy kinds of wild grass would work their way through the sand or gravel, and entirely supplant the cultivated grasses—when the whole must have another covering, or be abandoned as worthless. If to be planted with corn, or any of the root crops, my course has been to turn over the turf or sward with a plough having a

wrought iron share or coulter, ground to a sharp edge in the driest season, say in the month of September—roll down as hard as possible, carry on in the winter a sufficient top-dressing of compost, twenty cartloads to the acre, and in the spring plant with corn or roots, without disturbing the sod.—When the corn or roots are taken off, the surface is made smooth with the cultivator, or hoe and harrow, and late in November, or just before the heavy frosts set in, sow with herd's grass and red-top seed, half a bushel of the former and one bushel of the latter to the acre. The field is then rolled, which completes the process. If the plough does not turn the sods smooth, it will be necessary to follow it with the bog-hoe, to level the uneven places. By keeping the sod undisturbed in the cultivation, a more firm and compact surface is formed, upon which oxen or horses may work, generally, without danger of miring. If the land is intended for grass, without the intervention of a hoed crop, the turf is turned over with the plough, as before stated, in August or September, or as early as the surface becomes dry enough to admit the oxen or horses upon it; then follow with the bog-hoe, and turn over such parts as the plough has left unturned, make the whole smooth with the hoe, and late in November, spread on a top-dressing of compost, not less than twenty cartloads, made half of loam and half of stable manure, to the acre; then sow the grass seed, and bush, and roll down. If the ground be miry, so as to render the use of the plough impracticable, the bog-hoe must be resorted to, and the whole turned over by hand, and top-dressed, and seeded to grass, as above stated. The cost of turning over with the hoe will be twenty dollars per acre, at the usual price of labor. This mode of culture completely subdues the natural wild grasses, and gives a compact and rich surface of vegetable mould, which will give an abundant crop of the best English hay for four or five years, without the aid of more manure. If the sod is disturbed and attempted to be pulverized in the course of the cultivation, the surface, when laid to grass, will be loose and spongy—an extra top-dressing of loam and manure will be required, and after all, the surface will not become so compact, nor the produce by any means so great. Should meadows be found too soft and miry to admit of their being ploughed in the summer or autumn, and the expense of turning with the hoe should be thought too great, I would advise ploughing in the spring, when the frost is out, to the depth of three or four inches, carting on the manure, and then sowing or planting at a convenient and proper season. The art of reclaiming these low meadows, consists in taking off all the surplus water by judicious draining, and in thoroughly exterminating the natural herbage and grasses. This being effected, we have our rich bottoms, equally as productive as the deep alluvials of the west, and obtained at a cost and sacrifice infinitely less.

The third particular in which peat lands may be considered valuable to the farmer, consists in furnishing him with a very important ingredient for his compost. Peat is made up principally of decomposed vegetable substances, with a portion of the lighter particles of vegetable mould, washed in from the surrounding highlands. But when taken fresh from the pit, it contains certain antiseptic properties, injurious to vegetation, which must be absorbed or neutralized, by a combination with other substances, in order to render it food for plants. This may in some measure be effected by exposure to the action of the air and frost. Where the surrounding uplands are composed of gravel or sand, the peat or swamp mud may be called silicious, and is less valuable for manure, especially if the adjacent uplands rise abruptly; when composed principally of clay, the peat is aluminous—this is frequently found resting on beds of marl, and is considered much richer, and more valuable for the compost heap.

I have annually, for some years past, used on my farm some hundreds of loads of peat mud, which is either thrown into my hog stye or mixed with fresh stable dung, or with lime. When mixed with green stable manure, the proportions are two parts of peat mud to one of dung; and I am confident, from repeated experiments, that a load of this compost well mixed and fermented, will give as great a produce and a more permanent improvement to the soil than the same quantity of stable manure. In this opinion I am not alone. Other accurate and intelligent cultivators have made similar experiments with similar results.

The vegetable substances of which peat is composed having been decomposed in stagnant waters, they have not passed through a putrefactive fermentation, and are therefore supposed to retain much of their natural oils, gums and acid. Peats in this region, are also supposed to contain portions of sulphate of iron, or copperas, oxide of iron, &c. This opinion is formed from noticing the difference between the effect produced by using the peat mud on ground, when first taken out of the meadow, and that which is produced after fermentation, with stable manure, or by mixing it with lime. The ashes of peat have little or no perceptible effects, when used alone, but by mixing them with lime, they become a valuable manure.

That our peat may possess other and different properties, which are in a great or less degree injurious to plants, is highly probable. These can be detected and remedied only by the aid of science. It is to the agricultural chemist that the practical farmer must look for a development of his resources, to remove the obstacles which impede his progress, and to impart that information which will give confidence to action, and a successful issue to labor.

With an earnest desire that you may persevere in your useful labors,

I am, dear sir,
With the highest respect,
Your obedient servant,
E. PHINNEY.

Having two years since, given to Dr. N. C. Keep some instructions relating to the management of peat compost, that gentleman communicated them to his father, an old and intelligent farmer, residing at Longmeadow, upon the Connecticut river; and the experimental trial having been made to his satisfaction, he politely furnishes me with the following interesting statistics:

To Charles T. Jackson, State Geologist, &c.

Dear Sir—Being much indebted to you for information in regard to the use of peat, as a manure, and the mode in which its acid properties may be not only neutralized but made a most valuable food for plants, I beg leave to state, that in the fall of 1836, I took from my bog about three cords of peat, and placed it in a pile on the nearest solid land in the woods. It remained there undisturbed until sometime in November, 1837. By the action of the frost of the preceding winter, and the heat of the summer, it had lost much of its adhesive property, and was greatly reduced in weight.

I now brought it home, and while one was unloading, another sifted in lime with the hand, (it having been previously slaked to a fine powder,) at the rate of one bushel to a cord of peat. Lime having been thus scattered evenly through the whole mass, nothing further was done to it until about the middle of next May. Observing, after the manure had been removed from the barn-yard, that a considerable quantity of water from the rains had collected itself in the lowest part of the yard, (say six or eight barrels,) I had the peat removed into it. The garnet-colored wash of the yard was rapidly and entirely absorbed. I allowed it to remain in this situation until the first of June, during which time its color had changed from mahogany to a jet black. Fermentation did not take place.

By the successive action of the frost, lime, and the wash of the yard, the sensible qualities of the peat had very much changed. When first taken from the bog it was pulpy and very adhesive—could be spread like butter; now it was a fine powder, having entirely lost its peculiar adhesive properties.

I used the manure thus prepared, for squashes—planting fifteen rods of ground, very sandy and much exposed to drought. After the manure had been dropped, (one shovel full in a hill,) I sprinkled a little lime in each hill, directly upon the peat.—Upon this I planted the autumnal marrow squash. The seeds came up well, and the plants were of a healthy color. Some of the plants were entirely destroyed, and all of them badly eaten by insects; the yellow bug was most destructive. The plants, after they had recovered from this shock, grew more rapidly than any that I had before witnessed. The color of the vines, and the rapidity with which they covered the ground, were most convincing proofs to my mind that they were perfectly healthy, and well supplied with nutriment. In the severe drought which came on in the summer, these vines, for many weeks, did not appear to suffer, while others of a similar kind in the neighborhood, were dead and dying. The result was, that notwithstanding the long continuance of the drought, in which nearly all our potatoes, peas, &c. were killed, these squashes were preserved, and yielded a middling crop.

I also used the compost, as above, on intervale land, near the Connecticut river—soil alluvial—no stones or gravel—can be easily compressed—does not bake in the sun—has been cultivated for more than one hundred and fifty years, and yields a very scanty crop without manure. The compost was spread over the ground and ploughed in, at the rate of nine cords to the acre of ground: thus prepared, I planted thirty rods with sugar beets—distance between the rows, eighteen inches—hills eight inches—one seed in a hill. The seeds proved bad, not more than one-third coming up—yet I had 116 bushels of beets; while above an acre of the same land manured with the best stable manure, at the rate of twelve cords to the acre, did not produce one hundred bushels. Two rows of potatoes were planted next the beets; the land had been designed for beets, and was prepared precisely the same. Between these two rows and more than an acre immediately adjoining, (where a large quantity of best barn-yard or animal manure was used,) there was a very perceptible difference in favor of the former. I also planted a few hills of potatoes on very sandy land, in the latter part of June. Into the hills I put peat, which had been saturated with lye, from

the bottom of a soap tub—no lime. The tops of these potatoes, during the whole drought, were of the most living green, and the most luxuriant growth that I ever beheld. They were killed by the frost in the fall before maturity. The potatoes were small.

In conclusion, I would mention that I am so well pleased with the result of these experiments on a small scale, that I am now preparing one hundred and fifty cords of peat and fifty casks of Camden lime, and all the animal manure I can make, to enrich as fast as possible my whole farm.

Expense.—I get out my peat by ox-team and cart. Three men can, in this way, get out eight cords per day, $4 00; price of lime, $1 50 per cask. My peat being three and a half miles from my barn, that portion of it which I bring home, I estimate to cost me for carting, $1 00 per cord.—The peat and the lime for the compost—using one-third of a cask of lime to a cord of peat—then, cost me on the ground near the peat bog—three cords of peat, $1 50; one cask of lime, $1 50; that which I cart home, $1 00 per cord more.

I intend to put about one-sixth part of animal manure, but as it cannot be purchased in any adequate quantity, it is more difficult to fix a price.—The nearest place where livery stable manure is sold, is four miles; price there per cord, $3 00; cost of carting, $1 50.

Five cords of peat delivered,	$7 50
Two and one-third casks of lime deliv'd,	3 50
One cord livery stable manure,	4 50
	$15 50

divided by six, the number of cords, not estimating the increase of quantity from the bulk of the lime, gives the cost, two dollars and fifty-eight cents, delivered, or one dollar and fifty-eight cents per cord at the peat bog.

(Signed) SAMUEL KEEP.

Dear Sir—Herewith are the facts collected with care, at my request, by my father, Samuel Keep, of Longmeadow. My own opinion is, that a new era has begun in agriculture. The quantity of one-third of a cask of lime to a cord, was selected in the absence of chemical experiments, to determine how much was absolutely needed to neutralize the ulmic acid, because he prefers to put on ten to twelve cords to the acre—and twelve cords would take four casks of lime to the acre. If lime was as cheap as in Maine, he would probably have put in more. Notwithstanding the expense appears to be great, my father feels confident that he gets a better article in compost at $2 58, than the livery stables furnish at $3 00, with the additional cost to him of $1 50 for carting, making $4 50.

N. C. KEEP.

The great principles of Agriculture are the same every where. Animal and vegetable matters constitute every where the food of plants; and heat, moisture and atmospheric air, universally, the active agents of vegetable nutrition. With a knowledge of the truth of these great principles, it is the province of man to apply them, under the various contingencies of climate, soil, aspect and seasons. And this is a labor in which the mind, enlightened by science and fortified in its conclusions by experience, can do far more than the hands. The cultivated mind, like steam power, is a labor-saving principle, capable of performing, or of saving, an immense amount of labor.—*Albany Cultivator.*

For the New England Farmer.

Avondale, near St. Charles (Mo.) Aug. 21st.

Messrs Joseph Breck & Co.

Gentlemen,—Your paper of the 7th inst, is just received, and seeing in it an account of the failure of the "Whitington White Wheat" in consequence of its proving to be a *winter*, instead of a *spring* wheat, and seeing further, a suggestion to *mow* it, in the expectation of its producing *next* year—I hasten to inform you of an experiment made by me with *winter* wheat, which if it reach you in time may possibly be of service to those who have been disappointed.

In the fall of 1837 I sowed some *white wheat*, but not the "Whitington" and had a remarkably fine crop. Its appearance early in the spring of 1838 induced me to try an experiment with *fourteen quarts* of the seed, which I had left after my fall sowing, in order to ascertain two points—first—whether it could be made a *spring* wheat—and secondly, whether the oft repeated statement was true, viz: that smooth stem wheat *(winter)* sowed in the *spring* could become *bearded*. The result of the experiment I herewith send you.—Above twenty heads or more came to maturity in 1838 and was good wheat—the balance produced nothing. I did nothing with it except pluck the heads that had come to maturity and throw the grain away. Having satisfied myself with this part of the experiment, I allowed the wheat to remain, entirely undisturbed, till THIS year, not doubting but that it would all come to maturity like other fall wheat; and having very little doubt that it would come bearded (it was a smooth stem wheat.) I find however, it does not change its nature—it is still smooth stem wheat. It however came much later, perhaps two or three weeks late than fall-sown wheat, and yielded I presume about three pints or two quarts of seed—I not did gather it, and of course did not measure it—but being a Yankee exercised my birth-right and *guessed* at the product.

From this experiment I am inclined to think that those who sowed the "Whitington wheat" may effect some return for their seed, if they should leave it *undisturbed*. I think I should have gotten a larger return this year, had not the winter killed much of it. Whether mowing it will benefit it or not, I presume every man can judge for himself; I thought my experiment so much to the point at issue, that I send you this "*unlicked cub*" in the hope it may reach you in time to prevent the destruction of the "Whitington wheat."

With sentiments of respect,
I am, Gentlemen, Yours,
WILLIAM CLOUGH.

P. S. In examining this hastily written scrawl I find there may a question arise, viz: whether, when "I plucked the ripe heads and threw the grain away," I threw them among the remaining wheat, and consequently whether the "three pints or two quarts" were not in the produce of the grain thrown away—I therefore state, that the produce *this* year, was from the wheat sown in the *Spring of* 1838 *and not from the grain thrown away.*

Dr C. T. Jackson, the geologist of Maine, has been engaged to make a geological survey of the State of New Hampshire, under an act passed by the Legislature of that State at its last session.

It is stated that there are one million of mulberry trees growing near Northampton, Mass., and three millions on Prince s grounds, Flushing, Long Island.

Massachusetts Horticultural Society.

EXHIBITION OF FLOWERS.

Saturday, Sept. 7, 1839.

The display of *Dahlias* was the best we have had the present season. Col. Wilder takes the lead: he presented twentysix fine specimens. Among them we noticed Rienzi, Ne plus ultra, Ansell's Unique, Knight's Victory, Sarah, Striata formosissima, and others of great beauty.

Messrs Hovey & Co. presented ten varieties, viz: Ne plus ultra, Striata formosissima, Unique, Rienzi, (fine,) Mrs Rushton, Middlesex Beauty, &c.

By Joseph Breck & Co.: Striata formosissima, Ansell's Unique, Golden Sovereign, Star, Granta, Medona, Gem, Sarah, Ariel, &c.

By Mr D. McIntire: Sudbury Hero, Mrs Rushton, and Rival Sussex.

By J. J. Low, Esq.: Striata formosissima, and Unique.

Mr J. L. L. F. Warren, of Brighton, presented many fine specimens with other cut flowers.

Bouquets, by Mr Wm. Kenrick, J. Hovey and S. Walker.

Cut flowers, Asters, Balsams, &c., by Messrs Breck, Warren, Johnson, and S. Walker.

Native plants, by Wm. Oakes, Esq., (exhibited Aug. 31st.)—Lobelia cardinalis, L. inflata, Mikania scandens, Zizania aquatica, Mentha borealis, Gerardia purpurea, Liatris scariosa, Polygala sanguinea, Sanguisorba Canadensis, Helianthus divaricatus, Corcopsis trichosperma, Corylus Americana, Sonchus acuminatus, Cicuta bulbifera, Scirpus Eriophorum.

Plants exhibited by Wm. Oakes, Esq., Sept. 7—Arbutus Uva Ursi, Liatris scariosa, Myrica cerifera, Lospedeza hirta, and L. sessiliflora, Arum triphyllum.

Native plants, by E. Weston, jr., Esq. and F. Parker: Lobelia inflata, Gnaphalium uliginosum, Anthericum Canadense, Ranunculus repens, Polygonum sagitatum, Hypericum parviflorum, (in fruit,) Potentilla argentela, Neottia cernua, Gentiana crinata, (in bud,) Aster Dumnosus? A. Cyaneus, A. Laevis, A. Pumiceus, Solidago nemoralis? Bidens crysanthemoides, Trifolium arvense, Aster corymbosus, Eupatorium verticellatum, Lobelia inflata, Aster amplexicaulis, Hypericum parviflorum, Helianthus divaricatus, Apocynum androsamifolium, Gerardia maritima, Chelone glabra, Mentha viridis, Neottia cernua, Trichostema dichotoma, Mentha borealis, Hedysatum hamifusum.

For the Committee,
S. WALKER, *Chairman.*

☞THE COMMITTEE ON FLOWERS

Are requested to meet at the rooms, 23 Tremont Row, on Saturday next, 14th inst. at 12 o'clock.

Per order,
S. WALKER, *Chairman.*

Boston, Sept. 7th, 1839.

EXHIBITION OF VEGETABLES.

J. L. L. F. Warren, Esq., Brighton, exhibited the following varieties of the *Love Apple:* Golden Drop, Crimson Pippen, and common variety.

From John Hovey, Esq., Roxbury: Imperial and Superb Royal Vermilion *Tomatoes*—superior to any thing exhibited this season.

For the Committee,
SAMUEL POND.

COST OF RAISING SUGAR BEETS AND OTHER ROOTS.

In examining an estimate of the expenses of making beet sugar in this country, many farmers will consider that the expense of raising the roots is reckoned too low; this is owing to the little attention that has been paid to root crops; and to farmers in general not being acquainted with the best and most economical method of culture, and not having machines and implements to enable them to manage the growing of root crops to advantage.

These unfavorable opinions will in a measure continue, till root culture is more in practice, for though cases are stated of crops raised at a small expense, they will be regarded as extraordinary cases, and estimates made on paper, in which no error can be pointed out, will be looked upon as something uncertain; yet these favorable accounts will lead the enterprising and intelligent to try and see whether these things are so, and although their expectations may not always be realized, yet they will find a great advantage in attending to root culture and be led to inquire into the most frugal method of pursuing it. Farmers who dig up a small patch and sow it in beets, and do not weed it till there are five hundred weeds to one plant, may find that the cost of raising a bushel of beets is one dollar, when with prudential management in raising on a large scale, ten or twelve bushels could be raised with this expense.

In raising beets and some other crops in a garden, we have managed to do the weeding before sowing, and find that it is a great saving of labor; that is, pursue that manner of culture that will destroy the weeds before the seed is sown; and the same plan may be followed in field culture, and even to greater advantage, as most of the labor can be done by animal labor, which is much cheaper than manual labor in this country, and this as has been observed in the articles lately published on the subject, will enable us to raise beets as cheap as they are raised in France.

Our method has been to put on the manure and stir up the ground in the fall or early in the spring —the former is preferable, as the frost will loosen the soil and make it mellow, and the weeds will start in the spring before the soil is dry enough to work: when the weeds were well started, we worked the ground over again. About the 20th of May the ground was well worked over, and the seed sown, after being soaked, so that it would come up in a short time; the plants were up and large enough to hoe when scarcely any weeds appeared, the hoeing was done in a short time, the soil being very light and mellow, and there was but little trouble on account of weeds through the season, they having been mostly destroyed before sowing. If this plan should be pursued in field culture, it would save nearly one-half of the expense. One hour's work with a horse and cultivator in stirring the earth and destroying weeds before sowing, would save several days in hoeing.

The following method of culture for a field crop, would be very economical as to weeding, which seems to be the most expensive part of cultivation. A piece of land, a deep mellow soil, that has been well manured and planted one year in corn or potatoes, would be in good condition for a beet crop. If it has been ploughed more than one year, there would be danger from the grub worm, which we believe is the principal injury from insects to which the sugar beet is liable.

A piece should be selected that can be ploughed deep, and the stones, if any, removed. If there has not been sufficient manure applied to the previous crop, apply the manure and plough the ground very deep in the fall, if it cannot be done at this season, then as early as possible in the spring. When the weeds have started, go over it with a cultivator, and in a few weeks go over it again in the same way; this will loosen and pulverize the soil and destroy the weeds. From the 20th of May to the 1st of June, let the earth be thoroughly stirred with a cultivator, or if the soil be not very loose it may be well to plough it again, then go over it with a light harrow to make the surface level and smooth, and the soil fine: be ready to sow as soon as the ground is prepared, while the surface is moist, and that the plants may get the start of the weeds.—Pour water as hot as can be borne by the hand on the seed, and let it soak a day and a half or two days, then it will vegetate and be up, and the plants will be large enough to hoe before the few weeds that are liable to grow, get up so as to be much trouble.

Sow the seed with a machine and the expense will be light. Let the rows be from two to two and a half feet apart, then a light cultivator may be used between the rows; in thinning the plants let them stand about one foot apart. If any places are vacant from the seed not growing or the grub worms eating them, the deficiency may be supplied by transplanting: though transplanted beets do not form so handsome a root, yet they yield about as much as the other. The expense for weeding and loosening the soil will not be great. In harvesting, if the beets cannot be pulled easily, a furrow may be ploughed near each row with a horse plough, then they may be pulled with little labor. By this, or some better way if it can be devised, beets may be raised at a small expense, and as lands and animal labor are cheaper here than in France, and as much labor can be done here by animals which is performed there by the hands, we think our advantages are equal to those of France in the cheapness of manual labor. But supposing our advantages in raising the beets are not equal as to a cheap production, we have reckoned the expense higher in the calculations we have published, so as to conform to a fair estimate on all expenses. Instead of $3 20 per ton as in France, we have reckoned at $5 per ton. No calculation on the expense of raising beets or other crops can be made exactly suited to all parts of the country, as the prices of labor and land are different. Near cities and large towns, and near the seaboard, owing to good advantages for markets and communication, lands are higher, and the rent of them more, of course, than in the interior; in such cases labor too is usually somewhat higher.

Estimated Expense of an acre of Sugar Beets.

Use of an acre of land well prepared for beets and manured, or managed in the previous crop—	$12 00
Ploughing	4 00
Cultivator-*ing*, horse, cultivator and hand two hours	50
Twice more before sowing	1 00
Harrowing	50
Seed $2 25, sowing with a machine 75	3 00
First hoeing	4 00
Second hoeing, thinning, and transplanting to supply deficiencies	4 00
Hoeing again and loosening the ground with machines,	2 00
Harvesting	9 00
	$40 00

Make the rows 2 feet 4 inches apart, and then a cultivator can be used in hoeing. If the beets stand one foot apart in the rows, and weigh 2 1-4 lbs. each, the yield will be 20 tons. In rich ground at that distance, a great number will weigh 4 or 5 lbs. each; twenty tons is a good crop, but not extremely large, for in some cases 25 or 30 tons to the acre have been raised in this country. At the above expense of 40 dollars to the acre with a yield of 20 tons, the cost would be two dollars per ton. We make this estimate to show how cheap beets may be raised under favorable circumstances, such as good land at a fair price, convenient machinery and implements, and the most prudential management in the culture, with labor at a moderate price, and a favorable season. We have no doubt that in some parts of New England beets could be produced in great abundance at the above price; but we must not always expect a combination of favorable circumstances.

Supposing we reckon the produce only two-thirds as much as above, say 13 2-3 tons and the cost 32 1-2 per cent. more, which will be $53 33; then the cost of the beets will be only $4 per ton, one-fifth less than Mr Bosson reckoned in his calculation on the cost of beet sugar. If we reckon 50 pounds to the bushel, 13 1-2 tons per acre would be only 533 bushels, which would be no more than a middling crop; not half as much as has been raised in a number of cases that have been named.—*Yankee Farmer.*

REMARKS ON THE USE OF LIME IN AGRICULTURE.

We may now draw, says the highly intelligent author of an essay on the use of lime, a few plain and practical inferences from what has been stated, and which are sustained by thirty years practice in the use of lime.

1st, That lime operates equally well, whether applied in a *hot* or *effete* state, provided the condition of the ground upon which it is used, be such as to render a calcareous application beneficial.

2dly, That, in respect of operation, it is immaterial whether the lime be used upon grass land or summer fallow, and that objects of conveniency ought chiefly to weigh with the farmer in ascertaining the most proper time for applying this article. Upon old grass land, it is perhaps best to plough first, and to summer-fallow in the second year, when lime can be applied. On new and clean grass land, hesitation is superfluous; it may be limed at the outset, that is, before the plough is admitted.

3dly, That to lime moorish soils is a hazardous business, unless dung is likewise bestowed; but to repeat the application upon such soils, especially if they have been severely cropped, is almost a certain loss, and that a compost of lime and rich earth is, in such cases, the only substitute.

4thly, That strong loams and clays require a full dose to bring them into action; such soils being capable of absorbing a great quantity of calcareous matter. Lighter soils, however, require less lime to stimulate them, and may be injured by administering a quantity that would prove moderately beneficial to those of a heavy nature.

5thly, That upon fresh land, or land in a proper state for calcareous application, lime is much superior to dung. Its effects continue for a longer period; while the crops produced are of a superior kind, and less susceptible of injury from the excesses of drought and moisture. Finally, the ground, particularly if of a strong nature, is much easier wrought; and, in many instances, the saving of labor would almost tempt a judicious farmer to lime his land, were no greater benefit derived from the application than the opportunity thereby gained of working it in a perfect manner.

It may be added, that though strong soils require to be animated with a good dose of lime, those of a light texture will do equally well with little more than half the quantity requisite on the others, especially if they are fresh, or have not already received an application of calcareous matter. in every case it is the farmer only who can judge of the quantity to be given: but, as a general principle, it is safer to exceed the proper quantity than to be below it. In the latter case the application may prove useless, and the whole expense be lost; whereas, it rarely happens that injury is sustained from an excess, especially if more or less dung is soon after administered."—*American Farmer.*

From the Maine Farmer.

SALTPETRE FOR GARGET.

Taking sometime since the hint from the Farmer, I tried saltpetre as a remedy for the *garget* in cows; and am able from the result to state—and I do it with confidence—it is decidedly the best remedy I ever knew used for that troublesome disorder to the dairy. The cow, otherwise an excellent one for milk, which I gave it to was so badly diseased, or rather so subject to the disease, as to be nearly useless a great part of the summer season. She was a *doomed* jade to be passed over to the butcher the coming fall, when about the middle of May last I tried the saltpetre as recommended in the Farmer. I gave what I supposed a pretty strong dose—something like two ounces—and in less than twelve hours her milk was restored good as ever; and has not been affected since. Two oz. may perhaps be more than is necessary at a time for a dose. How this may be I presume not to say.

On seeing the good effect in this case I adopted the notion of mixing saltpetre with common salt to give stock. I allow at the rate of about 2 lbs per bushel—perhaps less would answer the purpose as well; I pretend however to no exact knowledge as to part. I have heard it suggested that saltpetre will have an injurious effect upon the blood of the animal if given constantly as with common salt. I am not determined as to the fact upon this point. Will you, Mr Editor, or some one or more of your kind correspondents, who may possess "experimental knowledge" upon the point, please inform through the Farmer.

The health and goodcondition of cows is indispensable to a profitable and wholesome dairy; hence no person that would *produce* good butter and cheese should allow himself (or herself) to be negligent upon any point that relates to the subject.

While so near the subject let me submit a few remarks bearing upon the inquiries of your correspondent Mr S. Wood in the Farmer of July 27 (No. 28) under the caption—

Cows "holding up their milk."

My remarks will be confined to the management of a cow that I milk, which has troubled me in the same way he complains of. What, however succeeded with this cow may not with any other. I mention the affair more as a matter of my success, than as a "remedy," particular or general, for cows similarly affected, or troublesome, for I consider it more a *habit* than a disorder.

"Old Flag"—for so we call her—had just had her calf weaned and she showed great anxiety and no small "fuss"—bellowing, shaking her horns, snorting, &c. as cows are wont to do on such occasions; and anon she "holds up her milk," as the saying is. I really believe the old jade essayed to retain her milk for "poor bossy"—and who would blame her for so motherly a disposition? So taking a stool and quietly seating myself by her side, I resolved to watch her manœuvering, and by perservering trial and kindness to overcome the evil. (Kindness, the *law* of kindness, I believe would overcome every evil in the world—not only cow-wills but man-wills, if but perseveringly persisted in.) I soon found she made very visible effort to conteract the "milk veins" so called, or to do a *certain something*—call it what you please—to prevent its flowing into the udder. This was in the morning, no such trouble at night when the excess of milk would not permit her to keep it from coming down. This if I understand Mr W. was the case with his cow, and his also had had her calf but lately weaned. What, now was to be done? Simply, if I can right, to *imitate* as nearly as the awkward hand can do the calf in bringing down the milk.

To describe, adapting the *phrase* to the hand process, thus—strip out what little may be in the bag, then press up hard against it as does the calf in *bunting*, and then still holding on to the teat but loosely excepting at ends of it which hold fast with the little finger and lower part of the hand. pulling at the same time gently downward. With our cow after some three or four times, alternately, "stripping, bunting," and pulling down the teats, as above described, the milk begins to flow—and as much as "Old Flag" may be disposed she cannot stop it after it begins to come. The above management has succeed with our cow and whether it will with others I leave it to the trial of those who may choose to heed it.

In conclusion I will hazard on opinion. If we would be more kind and gentle towards the *gentle* cow, and particularly in milking, if we would be more careful to avoid hurting her tender soft teats, we should have less trouble in milking and fewer trickey, bad milking, skittish cows. That's all.

West Sidney, July 1839. B. W. F.

MULBERRY TREES AND THE SILK BUSINESS.

Northampton is certainly *one* of the great points from which intelligence on this subject emanates.

Many individuals possessing character and zeal are engaged in the work, and have been so engaged for years, and consequently something by this time should be the result of their investigations. We are not wide of the mark when we say that at least one million of mulberry trees are growing in this town and its vicinity, not including the innumerable seedlings. This fact of itself shows how much interest is felt and yet these trees are not owned by mere speculators. Almost every individual who has cultivated trees extensively this year is also a grower of Silk in Northampton. More of the raw material will be manufactured in this town and vicinity this season, than for the last ten years taken together, as the bounty given by the State will make it a most lucrative species of employment.

Five or six different individuals are feeding from one to two hundred thousand worms each, and many have smaller quantities; besides the immense number which have already wound their Cocoons.

We state these facts that it may be distinctly understood elsewhere, that raising trees is not the only consideration, but that growing Silk is the ultimate design of those engaged in the business in Northampton. Five or six large plantations of trees were set out this spring, for standard trees, besides those planted last season, with the express intention of allowing them to remain to grow silk; but as the price will remain high this autumn, the silk business cannot get a firm foot-hold until the trees are multiplied greatly, and consequently the price reduced.

We are satisfied the silk business has become permanently established in this country, notwithstanding public scepticisms; and farther, that it will ultimately constitute one of the most important products of the agriculturalist in the United States. The South will undoubtedly surpass New England in this matter, because the soil and climate are more congenial to both worms and trees. The southern people, who have suffered so much recently from the fluctuation in the price of cotton, are earnestly seeking out some new crop which will aid them in such emergencies. The land which has been exhausted by tobacco and cotton is just the soil for trees, and the negro children and infirm slaves of both sexes, are exactly suited to picking leaves and tending the worms. It is stated on undisputed authority, that *three millions* of trees have already been contracted for in Viginia, to be delivered in the fall of 1840! a fact conclusive in favor of the silk business.—*Northampton Courier.*

Whitewash your cellars and out buildings.—Last spring we reminded our readers of the advantages of whitewashing, and as we know that some neglected it then, we would again remind them of the advantages to be derived by it. Dog days are at hand when we always have a great deal of close weather, in which diseases are more apt to be generated than at any other season of the year, and during which most insects deposit their eggs. There are also many rainy days, which cannot be employed out of doors; we therefore advise those who have not before whitewashed their cellars and those parts of their buildings which need it, to do it now. By using a wash of quick lime while hot or as soon as it is slacked for this purpose, they will destroy the eggs of insects and do much to remove the cause of infection and effectually close up many places which would otherwise be favorable depositaries for the eggs of insects, and produce a sweet and healthy atmosphere around their buildings.—*Maine Farmer.*

Large Oats.—A gentleman took from the field of Mr George N. Powell, three miles west of this city, a spire of oats seven feet and nine inches high, including the head, which was two feet and nine inches long and well filled, having three hundred and ninetysix perfect kernels. The field contains about thirty acres, in any part of which, a man six feet high may stand erect and tie them over his head. This is the way oats grow in Illinois. —*Chicago Democrat.*

Flour was selling at Nashville two weeks since at $3,50 per barrel.

NEW ENGLAND FARMER,
AND HORTICULTURAL REGISTER.

Boston, Wednesday, September 11, 1839.

THIRD REPORT OF THE GEOLOGY OF MAINE BY C. T. JACKSON, M. D.

We promised some farther remarks upon this able report. We make them, however, with a good deal of diffidence. A scientific examination of the report is not proposed by us. That we shall leave to other hands. A general and popular knowledge of the principles of chemistry is common enough: but its manipulations and a thorough examination of its subtle processes, require peculiar facilities and advantages, leisure and expense, which few can give to it, and such improvements are constantly in progress, and the boundaries of the science are constantly becoming so much enlarged, that it demands almost the exclusive devotion of one's time and studies to keep pace with it.

All that we mean to do is, to state our difficulties in the way of adopting the theories in respect to vegetation and the use of saline manures, and particularly the carbonate of lime, which have suggested themselves from the statements made in the report itself, and other facts which have occurred to our observation. We should be very glad if these observations should be the means of calling out the learned geologist himself to give us a fuller illustration of his theory; and we shall in all cases welcome him cordially to the use of our columns.

The Dr. remarks in his report, page 123—

"Whoever considers the attempts made to raise wheat upon soil totally destitute of lime, will at once appreciate the value of that mineral substance and its importance in the production of grain. An imperfect or blighted produce is sure to follow the planting of this grain upon soils destitute of lime, while it is well known that certain districts where the soil contains this mineral are always favored with luxuriant and heavy crops. This is one of the settled points in agriculture, and one which every farmer should duly appreciate, if he wishes to prosper in his art. Indian corn requires but little if any lime, and hence we see excellent crops of that grain raised upon sandy plains, unsuited to wheat."

Professor Hitchcock says, ("Economical Geology," page 52,) "The grand desideratum in our soils is calcareous matter, that is, the carbonate of lime."

We are not about to deny the utility of lime in agriculture. It would seem that this point is determined; but that it is indispensable in the form of a carbonate—that without it our wheat is "sure" to be blighted, and that soils containing this mineral "are always favored with luxuriant and heavy crops," are points not so well established. Let us see how certain facts well attested, bear upon the case. We must necessarily present the matter in an irregular and desultory form, because our time and situation in travelling and away from home, forbid any other course.

Dr. Jackson says that these are all *settled* points in agriculture. But it is a fact that there is great disagreement among chemists themselves in regard to the mode of the operations of lime. Dr Dana considers the form in which it is found in the soil, whether as a sulphate, phosphate or carbonate of lime, of little or no importance; and that a bushel of wood ashes in its power of converting insoluble into soluble geine or the food of plants, is fully equal to a cask of lime. Sir Humphrey Davy, maintains, (Lectures, p. 284,) "that chalk and marl, or the carbonate of lime, will only improve the texture of the soil in its relation to absorption; it acts merely as one of its earthy ingredients." "The operation of quick lime and marl or chalk, (carbonate of lime,) depends on principles entirely different." It would seem likewise, from a remark of Professor Hitchcock, that he himself is not positive as to the particular form in which the presence of lime is essential to the success of cultivation. In the passage first quoted, he says the carbonate of lime is the great desideratum in our soils, but on page 48 he says, "I doubt not many a crop has failed from the want of that one per cent. of sulphate or phosphate of lime. Facts indeed seem to me to warrant the conclusion, that without lime in some form, land will not produce any valuable vegetation."

It is a curious fact in this matter, to which we may conveniently advert here, and seems to have surprised both of the learned geologists, that even the "limestone soils," that is, soils lying above limestone and full of the outcroppings of lime in the form of a carbonate, should "contain no more of the salts of lime than other parts of the State." Prof. Hitchcock here refers to the soils of Berkshire county. Dr. Jackson says, likewise, that "it is an interesting and curious fact that the soils of Thomaston, so celebrated for its lime quarries, should be wanting in lime." Prof. Hitchcock suggests a theory which we beg leave to state respectfully, is wholly unsupported by evidence, and in which we have no faith; "that the calcareous matter which the soil once contained has been exhausted by cultivation." But Dr. Jackson in his analysis of the Thomaston soil, (p. 152) showing that it contained of carbonate of lime only 0.2 in 100 parts, adds that "this soil was selected from the midst of a grove, where it had never been cultivated."

It would seem in the next place that lime is not entirely wanting in any of our soils. The domestic fowls when left at liberty, and the birds find no difficulty in obtaining all that is required for the shells of their eggs. The bones of all animals are mainly composed of it. It is found to a certain degree in all plants and in almost all animal manures. Prof. Hitchcook says, "in respect to the sulphate of lime or gypsum, it may not be unexpected that we should find it in all soils, since we know it to occur in all natural waters throughout the State.—Again, the sulphate and phosphate of lime were found in greater or less quantity in every soil analyzed. There is strong reason to believe that this salt is a constituent of all soils in their natural state." Vegetables of various descriptions contain phosphate of lime. Indian corn, according to Prof. Gorham, contains 1.5 per cent. phosphate and sulphate of lime. Rice, wheat, barley, rye and oats all contain notable portions of phosphate of lime, not only in the grain but in the straw." The dung of cows and of horses contain portions of phosphate, carbonate and sulphate of lime. The clays of Massachusetts and all argillaceous slate soils contain carbonate of lime. Now whether we have enough of this ingredient in our soils for the purpose of ripening our crops, or whether our occasional failures be owing to the deficiency of this calcareous matter in our soils, is a matter in whose determination facts are vastly more important than theories, which, to say the least, are imperfectly established. Let us look at some of these facts. First then, throughout the State wheat is almost invariably raised with success and abundantly on new lands, recently cleared, and where the wood or brush has been burnt and the ashes left upon the soil. This fact we believe will not be questioned. It is equally well established that in the first settlement of our country, take the State of Vermont for example, whose clearance is within the memory of many now living, wheat was as common and certain a crop as any which was cultivated; and in those places where new the farmers complain that they cannot raise it, or rather only occasionally succeed. Second, the farmers on Long Island, N. Y, feel so confident of success with their wheat if they can obtain leached ashes, that they are willing to go to an expense of twelve cents a bushel in order to obtain them for their wheat crops. If lime would have furnished an efficient substitute, they would long since have ascertained it, and saved themselves much expense and trouble. It may be said that there is always a portion of lime in leached ashes; but this is certainly not the particular ingredient on which they depend, or they would have discovered it by the repeated trials which they have made. A third fact in the case is, that large crops of wheat are often raised upon soils where the carbonate of lime is not found. This is the case with the alluvions on Connecticut river, where thirty and forty bushels of wheat to the acre have been repeatedly obtained. One of the best wheat districts in Massachusetts, where it has been cultivated for years with general and almost invariable success, is West Newbury, Essex county. No carbonate of lime has been discovered here. Upon the farm of Mr Adams, in Chelmsford, an alluvial soil on the Merrimack river, wheat has been raised successfully at an average rate of thirty bushels to the acre for twenty years in succession with but a single instance of failure from any cause. Upon the chemical analysis of this soil by Dr. Dana, it was found not to contain a trace of the carbonate of lime. Such an instance as this thus fully established, is as good as a thousand to disprove the position that the carbonate of lime is *indispensable* to the production of wheat. (See the Second Report of the Agriculture of Massachusetts. Appendix.) But it may be said in this case that the portion of lime needed was furnished by the manure applied. The manure itself came from the products of the land. It follows then most clearly that where the manure is returned to the soil, there can be no exhaustion of the ingredient necessary to the production of wheat. Indeed the doctrine suggested by Prof. Hitchcock, that our soils have been drained of calcareous matter by cultivation, where the land has been enriched by its own products, is not, in our opinion, likely to find much favor. The amount of lime or of silex found in any plant is a very inconsiderable matter; and until the earths can be rendered volatile and made to assume a gaseous form, it is difficult to conceive of their being carried away. The suggestion of Sir Humphrey Davy that an acre of clover or sainfoin would, if reduced to ashes, yield *three or four bushels* of gypsum, requires other proof than has yet been furnished to render it credible. A fourth fact, and a very curious one, is stated by Professor Hitchcock, which is, that on an examination of five of the most productive of the rich soils of the Western States, it appears "that although they are of the very first quality, the superiority of the western soils over those of Massachusetts (in respect to the salts of lime) will not appear as great as is generally supposed." Five analyses are given. Carbonate of lime is found in them in these proportions: 1.5 per cent., 1.3, 3.3, 2.8. In seven of the Massachusetts soils where the carbonate of lime is found, and two of these are from limestone soils, the proportions in which this form of lime is found are as follows: 1.3 per cent., 0.8, 3.2, 3.0, 2.1, 0.4, 2.0. But in respect to the presence of lime in the form of a sulphate or phosphate, the Massachusetts soils can hardly be said to be inferior to the western soils, from the tables given in Prof. Hitchcock's report. Indeed they present a greater average proportion. In the fifth place, there is wanting the proof from facts that the application of lime to the soil in any form in Massachusetts, has been sure to secure a crop of wheat, according to the statement of what Dr Jackson pronounces a settled point in agriculture.

The application of lime to the seed of wheat after it has been steeped in brine, is an established remedy

against the smut in wheat; but whether in this case it is the lime or the brine or the combination of the two, is not so well determined. It is settled that rinsing the seed in pure water and then applying lime is not effectual. A case likewise has not come under our observation, where when the wheat has been washed with brine and then sprinkled with gypsum or ashes, the smut has followed. But in all the inquiries we have made in respect to the application of lime to the soil, whether in the form of quick lime or mild lime (carbonate of lime,) a single case has not come under our notice, where as well as we could judge, it has been proved effectual against blight; not a single case in which its efficacy in any form has been so marked and signal in respect to the crop that the farmer has been able to say confidently, "the lime has done this." We of course speak only of trials which have come under our observation. These have not been few. We wish the farmers would furnish us with other facts in the case. The application of the marls the last year in Berkshire was, we believe, a universal failure.

We know very well how imperfectly and carelessly experiments of this nature are made; and therefore are far from considering the case as decided. We regard ourselves only as inquirers in the matter, and shall keep our minds open to farther light. In the mean time we submit these considerations to persons interested in the subject, and shall continue it on another occasion.

H. C.

HORTICULTURAL SOCIETY IN LOWELL.

We are gratified to learn by the Lowell Journal, that a Horticultural Society has been recently formed in that place. A society of this description should be organized in every town in the State, however small it may be. An association of individuals for the purpose of introducing choice fruits and flowers, and for protecting them after they have been introduced, would produce a great revolution in the character of our fruits, as well as increasing the quantity, which is at present far too small for the population, as well as inferior in quality.

If every landholder would set out a few choice fruit trees about his house, there would soon be no inducement to the thieving scamp to rob his neighbor's garden, as all would be supplied. We have been pained to learn from cultivators in various places, that they are obliged to gather their pears, plums, peaches, and other choice fruit prematurely, or they are stolen. We hope the example of Lowell will be extensively followed.

J. B.

BRIGHTON MARKET.—Monday, Sept. 9, 1839.

Reported for the New England Farmer.

At Market, 400 Beef Cattle, 650 Stores, 4000 Sheep and 420 Swine. Several lots of Sheep and a few Beef Cattle unsold.

Prices.—*Beef Cattle.*—We continue our quotations without much variation. First quality, $8 25 a $8 50. Second quality, $7 50 a $8 00. Third quality, $6 50 a $7 00.

Stores.—Yearlings $12 a $16. Two Year Old $18 a $28.

Cows and Calves.—Sales $30, $38, $42, $45, $55, and $60.

Sheep.—Dull. Several lots at market were quite ordinary. Lots were sold at $1 25, $1 50, $1 62, $1 75, $2 00, $2 17, $2 33, $2 62, $3 00, and $3 25.

Swine.—Several lots to peddle were sold at 5 1-2 a 5 3-4 for sows and 6 1-2 a 6 3-4 for barrows. At retail 6 a 6 1-2 and 7 a 7 1-2.

THERMOMETRICAL.

Reported for the New England Farmer.

Range of the Thermometer at the Garden of the proprietors of the New England Farmer, Brighton, Mass. in a shaded Northerly exposure, week ending September 8.

Sept., 1839.		5 A.M.	12, M.	7, P.M.	Wind.
Monday,	2	50	78	60	N.
Tuesday,	3	54	80	72	S.
Wednesday,	4	53	78	66	E.
Thursday,	5	63	76	65	S. W.
Friday,	6	59	80	68	S.
Saturday,	7	63	74	64	S. E.
Sunday,	8	60	62	58	S. E.

HORTICULTURAL EXHIBITION.

The annual exhibition of the Massachusetts Horticultural Society will be held at the Society's Rooms, No. 23 Tremont Row, (nearly opposite the Saving's Bank,) on Wednesday, Thursday, and Friday, the 25th, 26th, 27th September instant.

The Members of the Massachusetts Horticultural Society and the public generally are respectfully invited to contribute choice and rare specimens of Fruits and Flowers for the Exhibition, and to send the same to 23 Tremont Row, on Monday or Tuesday, the 23d and 24th inst., where Committees will be in attendance to receive them, and will retain the same subject to the order of the contributors.

Contributors of Fruits and Flowers are respectfully requested to send a list, with their specimens, giving the names of all the varieties presented.

Season tickets, and tickets for a single admittance, may be had at the door during the exhibition.

By order, SAMUEL WALKER,
September 11. Chairman of Com. of Arrangements.

Massachusetts Horticultural Society.

The members of this Society are hereby notified that Saturday next at 11 o'clock has been assigned for the choice of a Committee to nominate officers for the year, beginning on the 5th of October next.

And the members are also hereby notified, that on Saturday, the 5th of October next, at 11 o'clock, A. M. at their hall in Tremont Street, the officers of the Society for the ensuing year, will be elected, viz. a President, four Vice Presidents, a Treasurer, a Corresponding Secretary, a Recording Secretary, a Council, an Executive Committee, and Standing Committees on Fruits, Flowers, the Synonyms of Fruits, the Library, and on Finance.

R. T. PAINE,
Corresponding Secretary and ex officio
Recording Secretary pro tempore.

Boston, September 11.

Morus Multicaulis Trees from Seed.

The subscriber offers for sale 10,000 trees produced from seed of the genuine Morus Multicaulis. The seed was raised on his premises in 1835; the trees have been multiplied for the two last years by layers, their growth is more rapid than the original tree, and appear to be sufficiently acclimated to endure the winter, some of them having been left standing in the open field unprotected during the two last winters without any essential injury. The leaves are very large and equal in quality to any other kind for feeding the silk worm. Those who are wishing to purchase a superior kind of Mulberry are requested to call and examine for themselves, before the foliage is destroyed by frost.

CALVIN HASKELL.

Harvard, September 11.

MULBERRY TREES.

The subscriber has on hand a quantity of Mulberry Trees of a quality which is probably superior to any kind ever introduced into this country. They were imported *four* years since and though they have sustained the rigorous cold of the last three winters entirely unprotected, yet it is believed a *Southern or Western* climate would be more admirably adapted to their growth and propagation. Their foliage is most luxuriant and affords more nourishment than any other variety. Silk produced by worms fed with the leaves, has been pronounced by judges to be the best ever manufactured by them, and decidedly superior to the best Italian. A few thousand will be for sale if immediate application is made to the subscriber, where specimens may be seen.

Also—A few hundred Morus Multicaulis and Asiatic.

JOHN N. BARBOUR,
September 11. No. 30 Commercial Street, Boston.

TO WOOL GROWERS.

For sale a full blood Leistershire Ram, 3 years old this spring; was imported into this country in May, 1838, by the present owner. This ram is particularly valuable to raisers of sheep, as he is very large and of beautiful proportions, and produces extraordinary long wool of the best quality. Apply to JOSEPH BRECK & CO.
August 21. 4tis

WHOLESALE PRICES CURRENT.

			From	To
Ashes,	Pearl, per 100 lbs.		6 75	7 00
	Pot, " " "		5 37	5 50
Beans,	white, Foreign,	bushel	1 75	2 25
	" " Domestic,	"	2 00	3 00
Beef,	mess,	barrel		14 50
	No. 1.	"		13 50
	prime,	"		11 50
Beeswax,	white,	pound		
	yellow,	"	28	34
Cheese,	new milk,	"	10	12
Bone Manure,		bushel		35
	in casks,	"		40
Feathers,	northern, geese,	pound		
	southern, geese,	"	37	46
Flax,	(American)	"	9	12
Fish,	Cod, Grand Bank,	quintal	3 37	3 62
	Bay, Chaleur,	"		
	Haddock, new,	"	1 50	1 75
	Mackerel, No. 1	barrel	12 50	13 00
	No. 2,	"	10 50	10 75
	No. 3,	"	7 00	7 50
	Alewives, dry salted. No. 1.	"	6 00	6 50
	Salmon, No. 1,	"		23 00
Flour,	Genesee, cash,	"	6 87	7 00
	Baltimore, Howard street,	"	6 50	6 62
	Richmond canal,	"	6 37	6 50
	Alexandria wharf,	"		6 37
	Rye,	"		4 25
Meal,	Indian, in bbls.	"	3 87	4 00
Grain:	Corn, northern yellow,	bushel	96	97
	southern flat, yellow,	"	87	87
	white,	"	80	82
	Rye, northern,	"		85
	Barley, nominal	"		
	Oats, northern, (prime)	"		
	southern, new,	"	35	37
Hay,	best English, per ton,		16 00	18 00
	Eastern screwed,		12 50	13 50
Hops,	1st quality,	pound		16
	2d quality,	"		14
Lard,	Boston, 1st sort,	"	11	12
	southern, 1st sort,	"	11	
Leather,	Philadelphia city tannage,	"	29	30
	do. country do.	"	25	27
	Baltimore city tannage,	"	26	28
	do. dry hides,	"	24	25
	New York red, light,	"	22	24
	Boston, do. slaughter,	"	22	23
	Boston dry hides,	"	21	23
Lime,	best sort,	cask	95	1 00
Molasses,	New Orleans,	gallon	32	34
	Sugar House,	"	50	58
Oil,	Sperm, Spring,	"	1 12	1 15
	Winter,	"	1 20	1 25
	Whale, refined,	"	50	60
	Linseed, American,	"		
	Neat's Foot,	"	95	1 00
Plaster Paris,	per ton of 2200 lbs.		2 75	3 00
Pork,	extra clear,	barrel		
	clear,	"	20 00	23 00
	Mess,	"	15 00	17 00
	Prime,	"	12 00	13 00
Seeds:	Herd's Grass,	bushel	2 87	3 00
	Red Top, southern,	"	90	1 00
	northern,	"		1 50
	Canary,	"		2 25
	Hemp,	"	2 62	3 00
	Flax,	"	1 25	1 50
	Red Clover, northern,	pound	17	20
	Southern Clover, none,	"		
Soap,	American, No. 1,	"	6	7
	" No. 2,	"	5	6
Tallow,	tried,	"	12	13
Teazles,	1st sort,	pr M.	3 00	3 50
Wool,	prime, or Saxony Fleeces,	pound	60	65
	American, full blood, washed,	"	55	60
	do. 3-4ths do.	"	53	55
	do. 1-2 do.	"	50	53
	do. 1-4 and common,	"	45	50
Northern pulled.	Pulled superfine,	"	60	62
	No. 1,	"	55	58
	No. 2,	"	35	40
	No. 3,	"	25	30

PROVISION MARKET.

RETAIL PRICES.

Hams, northern,	pound	13	14
southern and western,	"	10	12
Pork, whole hogs,	"		
Poultry, per lb.,	"		
Butter, tub,	"	17	20
lump,	"	22	25
Eggs,	dozen	18	21
Potatoes,	bushel	50	75
Apples,	"	1 25	1 75
Cider,	dozen	1 75	2 00
refined,	barrel	3 00	5 00

MISCELLANEOUS.

ILLINOIS.

A correspondent of the New York Observer gives the following attractive description of the face 'of the earth' and mode of tilling it, in a section of the state of Illinois.

In travelling through Illinois, from Quincy to Springfield, and thence to Chicago by the way of Peoria and Ottawa, I did not notice a single *swamp*, large or small; and I cannot recollect that I saw an acre of really *waste* land in any one place. But suppose the whole state to contain a *million* of acres of such land, there is then no less than *thirtyseven millions* fit for cultivation; and by far the greater part of it, of the very best quality. I have not a single doubt that Illinois, alone, is capable of sustaining a population of *twenty millions*. Fortyfive bushels of corn to the acre, is less than an average crop; and with better cultivation it might be increased twenty per cent. Put *fifteen millions* of acres into corn, and then multiply it by *fortyfive*, and see what it will amount to. Put *ten millions* more into wheat, and estimate the average product at the very moderate quantity of twenty bushels to the acre, and it gives you 200,000,000 of bushels per annum. Then you have thirteen millions of acres left for rye, barley, hemp, farinacious roots, grass, timber, &c. Would it be strange, if before the thousand years of the millenium shall have half rolled away, Illinois, with such an extent of territory, and such a soil, should feed and clothe thirty millions of people? Missouri is nearly as large as Illinois, and and supposing the curse of slavery to be removed, (as I am sure it will be) is capable of sustaining nearly as dense a population. And then there are all the other great and fertile states of the valley, besides the immense unexplored regions, perhaps equally fertile, up on the tributaries, and about the sources of the Missouri and the Mississippi.

One of the reflections which forced itself upon my mind in travelling through a little of the West, and having before my eyes from day to day proofs of its extraordinary fertility, and of the little labor which it requires to produce a redundance of food, was, that these immense regions were intended and reserved chiefly for the millenium. The land is far too good for man, with those indolent and depraved propensities in full strength, by which he has been hitherto governed. Indeed, the two greatest objections to the west, in my judgment, are, that the land is too cheap and too productive. Taking human nature as it is, however industrious and virtuous emigrants from the scanty and rugged soil of New England may be, they must in general, without a miracle to prevent it, degenerate when planted down upon the fat vallies of the Scotia, the Wabash, or the Illinois. It is a law of our lapsed natures, not to work if we can help it. Ninetynine out of a hundred persons will throw off just about as much of the primitive curse as they can. If the labor of five days in a week is sufficient to support them they will not work six. If they can live upon the product of two days, it is vain to expect them to work three; and if they could subsist comfortably in any other way, they would not work at all. Where the laziness of the boy has been counteracted by early habits of industry, and the man has spent many of the best years of his life in hard labor, under that ironheaded task-master *necessity*, he may carry his habits along with him, and continue to moisten the soil with the sweat of his brow, from the mere love of action and regular employment. But I was told over and over again, when I was passing over those rich lands of promise, that after a while, the great majority of the Yankees, as they call them, who had been most laborious at the east, relax and fall into the habits of their neighbors. Now if this is the case, even with the fathers, what can we expect from their children, but that they will be *just as lazy as as they can be*—that is, as the soil and climate will allow; and if idle, then vicious, almost as a matter of course—for there never was a truer saying than that of 'the ancients,' that 'an idle man's brain is the devil's workshop.'

What then is the actual condition of a farmer who goes out with moderate means from Massachusetts or New Hampshire, and settles down upon a good section of land, wood and prairie, in Illinois? The first thing is, to fence as much of the prairie as he wants for immediate cultivation. The next is to plough it; which, if he does not happen yet to have a sufficient team of his own, he can hire done for two dollars and a half or three dollars an acre. If he wants to get a crop of corn the first summer, he has only to follow the plough, and drop the seed in every third furrow, to give him from fifteen to twentyfive bushels to the acre, without going into the field again till harvest time. I saw a great deal of corn, as I passed along, thus springing up between the furrows. The ploughing, however, must be delayed till the grass is quite green, otherwise it will turn and spring up through the sod, and you will lose your labor. The breaking up requires three or four strong yoke of oxen, and is done in this wise.

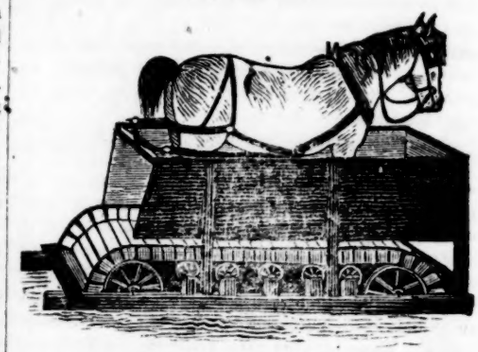
The beam of the plough is framed into an axle, and so guaged as to cut a furrow eighteen inches wide and four inches deep. The wheel for the furrow is four inches larger in diameter than the other, so as to keep the bottom of the plough perfectly flat. Thus prepared and once put in motion, it requires no one to hold it, except where the sward is very deep and tough. I noticed one plough at least, going without hands, and I never saw a handsomer furrow cut in my life. It takes about two years for the turf to become thoroughly pulverized, and then the land is tilled with as much ease as if it had been under cultivation a hundred years. One man, with two horses, will take care of forty acres of corn, as it requires no hoeing, and if the season is favorable it will yield him 2000 bushels. With this he can fatten a great many swine, besides feeding a large stock of cattle through the winter.

Wheat and all other grains, may be raised with about the same ease.

The open prairies serve him both for pasturage and mowing, and the less he owns the better; because large tracts will for a long time remain in common field, which he can have the use of, without paying taxes. A friend of mine has planted himself down on the margin of one of these prairies where, as he told me, he could fatten five hundred or five thousand cattle, if he had them. The young prairie grass is said to be exceedingly nutricious; and I am sure I never saw cattle look finer, in any of our white clover pastures.

BERRY STAINS.—A friend requests us to state that a teaspoonful of oil of vitriol mixed in a cup of water, will without fail remove any berry stains from garments without injury to the cloth.

Hale's Patent Horse Power and Patent Threshing Machine.



JOSEPH BRECK & CO. offer for sale this valuable machine and feel great confidence in recommending it as the best machine now in use. It will thresh from 75 to 100 bushels per day in the best possible manner. The horse power is calculated to propel any kind of machinery, is very simple in its construction, occupies but the small space of nne feet by two, and can easily be transported from one plaie to another, and when combined with the Threshing Machine it forms the most superior article for the purpose ever invented. They can be supplied at short notice at the N. E. Agricultural Warehouse and Seed Store.
August 28.

New York Urate and Poudrette Company.

Not incorporated but carried on by individual enterprise.

The manures are *not divided* among the Stockholders, as are those belonging to another establishment, *but sold*, to applicants, *for cash on delivery. Orders are supplied in the order of time in which they are received.* Urate 50 cents and Poudrate 40 cents per bushel, with contingent charges for bags or barrels, &c.

The company are daily preparing for use, during the warm, dry weather, the materials collected during the past winter, and will have several thousand bushels ready before the first of October next. The material is disinfected and rendered free from offensive smell, by a compound, every part of which is in itself a good manure.

The experience of the past and present years, 1838 and 1839, on Long Island, has satisfied many of the farmers that these manures have the *quickest* operation upon vegetable matter, producing *greater abundance*, and the *cheapest* of any manure they have ever tried.

Amended instructions for their use, the result of practical experience, will be furnished on application. The effect *of Poudrette* upon *Grape Vines and Morus Multicaulis* is beyond all comparison.

This company are erecting large and extensive works in the vicinity of the city of New York to prepare the manures, and farmers and gardeners may confidently rely on a supply.

Orders, *post paid*, directed to "*The New York Urate and Poudrate Company*," Box, No. 1211, Post Office, New York, or sent to the store of STILLWELL & DEY, No. 365 Fulton Street, Brooklyn, will be attended to.

The Company will be very much obliged to gentlemen who have used the manures, to give them a statement in writing what has been the result of their use and experiments in relation to them.
New York, August, 1839.

Multicaulis, Alpine and other Mulberries.

WILLIAM PRINCE & SONS, proprietors of the Linnæan Nurseries near New York, are ready to receive orders to any extent for all the varieties of Mulberries, including the Chinese Multicaulis, American Multicaulis, raised from seeds and very hardy, Expansa, Elata, Alpine, Canton, Broussa, Rose of Lombardy, Dandolo, Pyramidalis, &c., the six first named of which surpass all others and are placed in rotation according to merit. The prices will be moderate and terms easy, and priced Catalogues will be sent to every one desirous of purchasing. Fruit and Ornamental Trees and Shrubs, Green House Plants, Bulbous Flower Roots, Field and Garden Seeds, Rohan Potatoes, &c., can be supplied, and priced Catalogues will be sent to every applicant.
September 4. 3t

THE NEW ENGLAND FARMER

Is published every Wednesday Evening, at $3 per annum payable at the end of the year—but those who pay within sixty days from the time of subscribing are entitled to a deduction of 50 cents.

NEW ENGLAND FARMER.

[EXTRA.]

PUBLISHED BY JOSEPH BRECK & CO., NO. 52 NORTH MARKET STREET, (Agricultural Warehouse.)

VOL. XVIII.] BOSTON, WEDNESDAY EVENING, SEPTEMBER 4, 1839. [NO. 10.

From the Albany Cultivator.

THE CIRCUMSCRIBED FARMER,

We mean such as possess a limited capital, and limited desire for improvement, except in their own way, often decline taking an agricultural paper, because it teaches nothing, they say, that is adapted to their practice, or that is graduated to their scale; because, in fact, it is not oral, and delivered by word of mouth, but has been subjected to the operation of the printing press.

Let us ask these gentlemen, if they were disposed to have their son learn a trade, or to become a first rate farmer, would they select a teacher of circumscribed knowledge, who followed the practices of the last century, or knew only how to *kill land*, or one who was familiar with all the improvements of the age, and whose thrift in business would be a guarantee that he worked it *right*? Now the agricultural journal is to the circumscribed farmer what the good teacher would be to the boy—an instructor in the improvements and best practices in his business—written by those who have made and adopted them, and have profited by them—and for the particular benefit of those who have limited means, or cannot go abroad for the information they need. The modern improvements in farming go to economize labor, or rather to render labor more productive and profitable, and to keep up the fertility of the soil—two objects of as much or of more importance to the circumscribed farmer, than it is to the one of more extended means. The man who takes an agricultural journal profits by the experience of hundreds; while he who takes none, can profit alone from his own, and from that of perhaps a few neighbors. The adage teaches, that two heads are better than one, the world over.

These remarks are preliminary to some extracts we are about to make from John Lorain, a philosopher and a first rate farmer, written for the special instruction of circumscribed farmers, to whose notice they are respectfully recommended:

"In this country land is very cheap: an excellent ready cash market for the produce of the soil generally prevails. This offers every rational encouragement to the poor but industrious farmer, who depends principally on his own labor and that of his family for cultivating the soil occupied by him. He is but little affected by the high price of labor, or the idleness and insolence of workmen, which take place in every country where labor is scarce, unless the laws be oppressively severe.

"The principal reason why this class of farmers so seldom become wealthy, and but too frequently continue poor, is the desire of immediate returns from cropping, and the mistaken idea that the profits to be derived from rearing live stock, progress too slowly to answer their purposes. This induces them to crop the soil yearly, with but little attention to grass or an increase of cattle, until their grounds become so much exhausted that rest is absolutely necessary to procure crops worth gathering. The soil being greatly impoverished, and the seeds of the grasses destroyed, as far as perpetual ploughing and cropping can effect this ruinous purpose, the grounds rest with no other covering but that of some scattering and debilitated grass and weeds. This exposes the soil to the very injurious action of the sun, wind, washing rains and melting snows. When such grounds are ploughed for crops, instead of being richly stored with grass roots, and well covered by their tops, scarcely any vegetation is found to replenish them, or to nourish the crops grown on them.

"These ruinous practices naturally introduce poverty of soil, and its inseparable companion, poverty of purse. This, however, is not all; it entails on posterity the wretchedness introduced by their inconsiderate forefathers, or an Herculean task to counteract the curse of poverty which their negligence had introduced. Whether Satan is also the instigator of this evil, I do not presume to determine, but certain I am, that it is much greater, (so far as farming is concerned,) than the curse entailed on the soil by the fall of Adam. That seems to consist simply in brambles and thorns, including in these, such other vegetation as would compel man to earn his bread by the sweat of his brow. This curse we may all see is irrevocable, but we may also at the same time observe, that if man complies with heaven's mild decree, and removes those obstacles to the growth of plants which better suit his purpose, agriculture flourishes, and his rational wants are abundantly supplied.

"But when the hand of folly introduces the additional curse of poverty on the soil, this insatiable monster, like Aaron's serpent, swallows all the rest. Even brambles, thorns, &c. (the mild chastisement of heaven,) cannot prosper where poverty has obtained dominion over the soil, as may be readily seen, for this and every other vegetation grown on such grounds, looks sallow, starved and debilitated.

"That man is inexcusable, and ought to be punished for this sin against common sense, himself, his posterity, and the community in which he resides, is evident.

"Before this inconsiderate being enters the forest, glade or prairie, nature had been for ages enriching the soil for his use, in the way that has been described. The fertility of it might be preserved and increased, even by the circumscribed farmer, if a system of agriculture calculated to keep the ground fully replenished with decaying animal and vegetable matter was practised, and due attention were paid to the augmentation of live stock, in proportion to an increase of ability, instead of the ruinous practice of perpetual ploughing and cropping.

"Reason alone, demonstrates this interesting fact. It has also been clearly proved by actual practice, in almost every neighborhood, by the successful enterprise of farmers, who commenced their business on lands bought on credit, and covered with timber, without any buildings on them, and with not more than a pair of working cattle, and cows barely sufficient to supply the family with butter and milk. Nay, more—some who were not half as well stocked as this, have paid for their land, acquired an extensive stock of cattle, and become wealthy, although their mode of management was very inferior to that which has been proposed. They, however, increased their live stock in full proportion to the means furnished by the system of management employed by them.

"From first to last, they have been enabled to live better, and vastly more independently than those who relied principally on the plough. The cause of this is evident: milk, butter, cheese, wool, meat, hides and manure, are continually increasing. It is evident that but little manure can be obtained in the beginning; however, where that little is spread, the product is greatly increased, as is also the fertility of the soil for a succeeding crop and the grasses following it. Where a plenty of good grasses and hay prevail, young cattle will grow as much or more in one year, than they do in two when kept on pasture, fed bare during summer, and on straw through the principal part of the winter.

"It is considered proper to remark that, although many circumscribed farmers make considerable progress in increasing their live stock, their laudable enterprise, however, is too often suddenly checked, before they obtain half the number of domesticated animals necessary to the proper cultivation of their grounds.

"This evil originates in the prevailing error that huge piles of stone and mortar, or boards and scantling, are the best means that can be pursued by the cultivator to improve his farm. Hence it is, that we see almost in every part of Pennsylvania, where it is possible to effect this mistaken improvement, extensive barns and dwelling houses standing on farms, where we do not observe half the quantity of grass or number of cattle necessary for the proper cultivation of the surrounding soil."

THE NORTHERN SHEPHERD,

Is the title of a 12mo. volume sent us by the Kennebec Agricultural Society, for which we tender our thanks. It is a report made to that society by a committee appointed for the purpose, upon the diseases and management of sheep. It is divided into three parts, the first on the management of sheep, prefaced by a short description of the various kinds among us; the second on the diseases of sheep; and the third miscellaneous. From the cursory examination which we have been able to give to the work, we think it will serve as a valuable companion to the sheep-master and shepherd.

There are some general principles laid down and inculcated which we think important ones, and which we propose briefly to notice; and although we do not intend to go into an argument to prove them to be sound, we think most of them are so palpably true, that the reader will only need to be reminded of them to approve and adopt them in practice.

Wool, and not mutton, being the great object in Maine, a preference is given to the Merinos; and hopes are expressed, that by a judicious attention to crossing, the grand point of improvement aimed at will ere long be obtained, viz: a Merino fleece upon a Bakewell body.

The South Downs seem to rank next to the Merino, as having the next finest fleece, as affording excellent mutton, and as possessing a hardiness of constitution, and a vigor and activity, which enable them to support and to thrive upon bleak and barren hills, where the Dishleys would die from exposure or starve.

"*Sheep should not be kept too high,*" says the report, "unless intended for the butcher; for it is believed to be a true maxim in regard to them, 'once fat and never fat again.' If they once become fat and are suffered to fall away, it is difficult getting them so fat as they were before they began to grow poor." p. 27.

High rocky pastures are much the best for sheep.—"Nature, it seems, designed the sheep originally for a mountain animal; and although man has by art changed its nature in a surprising degree, yet he has not been able wholly to thwart her views, and the sheep loves still to feed on the hill top and cliff, where there is a pure and exhilarating breeze, and where it can shelter itself under the shade of trees, or a projecting rock, during the heat of our sultry dog-days. A high pasture should therefore be devoted to your sheep."

Salt and tar should be given to sheep.—"A piece of salt may be laid in a trough, and the sheep will lick it as they please, and if some tar be added to the salt, it will be a benefit to them, as tar is a very good stimulant when taken into the stomach, and it prevents annoyance from the different species of flies." We would recall to the recollection of the reader, the mode of administering these as practised in Spencertown, and published in our second volume. A log is hewn upon one side, which is then turned uppermost. It is then perforated upon the hewn side with holes made by a large auger, two or three inches deep. The holes are then filled with salt, and the hewn surface smeared with tar. In obtaining the salt, which the sheep are permitted to do as often as they desire, their noses become daubed with tar, which prevents the fly from entering the nostril.

Shelter during stormy weather, at all seasons, is considered indispensable to the health of the sheep, particularly after they have been shorn. "So tender and delicate is the skin of the fine wooled sheep, and so close are their fleeces, that there is great danger of pelt-rot being occasioned by too great exposure to the chilling influence of long and cold storms."

Sheep should be brought to the barn in autumn in good order.—"They are thus fitted to withstand the rigors of winter much better, and they will be carried through this inclement season with much less care and more economically than they can be if they are poor and emaciated when winter sets in." This is true of all farm stock.

Sheep require the stimulus of distention—they should be filled with something that they will eat. When fed upon green grass, a sheep consumes eight pounds a day. If this grass is converted into hay, it weighs but two pounds, and the two lbs. constitutes its winter ration. To ensure health, the six deficient pounds should be made up in water, vegetables or other food.

Pine or hemlock browse, are recommended to be given to sheep in winter. "I have for near thirty years," says the writer of a part of the report, "made use of hemlock boughs as the cheapest green food." It may be added, that the resinous qualities of these boughs, promote the health of the animal and prevent disease.

Sheep should not be turned to pasture too early in the spring—"for it takes their appetite from their fodder, and as they cannot graze enough to fill them, they lose flesh fast."

Sheep should not be crowded in sheds nor huddled together in one spot too long—"as that," says the book, "I am confident has produced disease in my flock. In one instance, I have no doubt the pelt-rot was thus produced, and nothing saved the whole flock from the scab but a timely application of oil to the sheep."

Open sheds are the best shelter for sheep.—If kept dry, the wind is desirable, though cold. It preserves the purity of the air, and promotes health.

Under the treatment in March it is remarked—'Take good care of your sheep this month, that they may be able to bring forth their young the better during the next." And under the treatment for April it is urged, to "make the sheep eat as much green food as possible each day. Grass is the best if you have it; next to that, potatoes. This month tests all the rest, as regards ewe sheep, for he who raises the greatest number of lambs from a given number of ewes, is supposed to be the best shepherd, all other things being equal."

We pass over the second part of the work, which treats of the diseases of sheep, and content ourselves for the present with making the subjoined extracts from the miscellaneous part.

"*Salt.*—I have mentioned that salt was considered by the Spanish shepherds as essential to the health of sheep, and this sentiment is very general in every part of Europe except England, whose situation renders the air sufficiently salt. The same consequence from similar causes takes place here. Upon Long Island and elsewhere near the sea, the cattle require no salt, nor manifest a desire for it; whereas north of the Highlands, they eat it ravenously, and it is thought essential to their health. The ancients also entertained similar sentiments upon this subject. Aristotle prescribed one peck every five days, during the summer, to one hundred sheep. We should consider this a large allowance, but it would be readily eaten. They also observe, that, however good your pastures may be, the sheep will tire of them if not changed, unless their appetites are kept up by salt."

"*Transitions from high to low food.*—With all stock it is allowed to be very dangerous to pass very suddenly from high feed to that which is scant and poor; or from plenty of green food to that which is altogether dry. Hence arises a very important maxim in respect to sheep; which is, as soon as the pastures fail towards the end of autumn, to put them to turnips or cabbages, if we have them; and this will perhaps be found our best system with respect to turnips—to sow a sufficient quantity for our sheep, to be eaten after the grass fails, and before the snow falls, so as permanently to cover the ground."—*Cultivator.*

From the Genesee Farmer.

METHOD OF USING THE CHLORIDE OF SODA.

A translation of A. G. Labarraque's method of using the chloride of soda, has been kindly sent us by Jacob Porter, the translator. This chloride is the most powerfully disinfecting agent known, and has been found of great use in dressing ill-conditioned sores, and as a means of purifying unhealthy places, and disinfecting animal substances. It is sold in a liquid form, at the apothecary's, by the bottle. It is used diluted with water. A bottle of the liquid, which costs but a few cents, will serve a family sometime, for disinfecting the air of vaults and other foul places about dwellings, purifying the air in sick chambers, in cellars, &c. Its great utility in lazarettoes and hospitals and, in Asia, in preserving from the plague, seems to have been tested and proved by officers of the French government. At this season, it is peculiarly beneficial. We subjoin some of the directions for its use.

"For ill-conditioned ulcers let a glass of the chlorated liquor be mixed with five times its quantity of pure water, and in this mixture dip the lint with which the ulcers are to be dressed. The dressing should be applied twice a day. If the sore become red and inflamed, this mixture should be still further diluted; if, on the contrary, the sore does not change its appearance, it should be dressed once or twice with some chloride with only half its quantity of water, so as to bring on a slight inflammation, which is indispensable for causing atonic ulcers to pass to a state of simple sores. The healing will then go on rapidly. At the time when the chloride is applied to the ulcer, the fœtid smell is destroyed.

"Gangrene, hospital putrefaction, ill-conditioned burns and scalds, old syphilitic ulcers, corroding herpetic affections, and the like, should be treated in the same manner.

"Cancer in a state of suppuration may be disinfected with some lukewarm or cold water, containing a twentieth of the chloride of soda.

"For ulcerations of the nasal organ, the throat, the palate and the gums, the chloride should be diluted with eight or ten parts of water. I twill, nevertheless, be necessary to touch these sores with a little lint moistened in some pure chloride.

"For the scald head, the chloride should be mixed with only an equal quantity of pure water, and the parts affected be moistened with this liquid twice a day.

"Great advantages have been obtained from using the chloride very much diluted in water, for all the purposes of the toilet. In a dose of from 25 to 40 drops [not to be taken internally,] it acts as a bracing and preserving wash, prevents the spread of herpetic eruptions, and cures certain diseases of the skin.

"The air of sick chambers, and the patients themselves, may be purified by mixing a spoonful of the chloride and six spoonfuls of water in a plate, and setting it under the patient's bed, indeed several plates with the diluted chloride may be placed in the same department if necessary. In this way the exhalations may be destroyed as soon as they are produced. It will be necessary to renew daily the chlorated water contained in the plates.

"In all places where there is a crowd of men or animals, whether sick or healthy, the air becomes corrupted, and acquires deleterious properties, owing principally to the animal exhalations. These exhalations may be destroyed by sprinklings of the chloride, diluted in from 25 to 30 parts of water; or by setting in these places (and they may be out of sight,) some vessels containing the chlorated water, which can never be in the least injurious, whatever may be the quantity. This method of purifying the air is indispensably necessary in lazarettoes, hospitals, prisons, poor houses, manufactories, churches, seminaries, convents, halls of study, and dormitories in colleges and boarding-houses, cabins of ships, court rooms, crowded theatres, saloons filled to excess on great occasions and the like.

"Sprinklings of the chlorated water will be more especially necessary whenever an epidemic or contagious disease prevails; they should be made in order to guard against the deleterious influence arising from the neighborhood of marshes, the rotting of flax, hemp and the like. They will likewise be serviceable in the diseases of domestic animals, in places where silk worms are raised; finally, in all places where the air becomes charged with exhalations, which, on being accumulated, produce fatal effects.

"In cases of asphyxia, produced by the exhalations, of vaults, sewers, or any considerable masses of putrefying animal substances, it will be necessary for the patient to breathe the concentrated chloride; and his chamber should be sprinkled with the chlorated water, so as subject him to the influence of the disinfecting agent.

"It is often necessary, sometime from a tender, pious feeling of regret, to preserve for a long time the bodies of deceased persons. A fœtid odor appears more or less readily, according to the temperature of the air, the state of the patient's body at the time of his decease, or the disease that terminated his life. This decomposition may be suddenly arrested; indeed, it may be prevented by sprinkling the body with some chloride diluted with water. For this purpose a bottle of chloride should be mixed with twelve bottles of water; in this mixture a linen cloth should be wet, laid on the body, and sprinkled occasionally with the liquid."

NUTRITIVE QUALITIES OF CHARCOAL. Though the importance of mixing charcoal with the food of animals, particularly that of swine, has been generally acknowledged, and its benefits extensively tested, still it has been supposed that it only acted as a corrective to the acid tendency of food, and facilitated fattening, by improving the health of the animal. Some experiments are, however, on record, which would seem to show that charcoal acts a more important part in the matter, than has usually been assigned to it.

In 1793, a family being driven from New York by the fever, were absent six or eight weeks before it was deemed prudent to return. A number of fowls confined in a loft in the workshop of the house were forgotten at the time of leaving, and as it was known that there was nothing provided for their subsistence, it was expected on the return, they would be found starved to death. To the astonishment of all, the fowls were found alive and fat, though there was nothing upon which they could have fed, except a quantity of charcoal and shavings; water being supplied from the grindstone trough.

These facts coming to the knowledge of a gentleman in New York, as we learn from the Recorder, he instituted the following experiment. He placed a turkey in a box or enclosure, 4 feet long, 2 feet wide, and 3 or 4 feet high, excluded light as much as could be done, and allowed a free circulation of air, and fed the turkey with soft brick, broken fine, pounded charcoal, and *six* grains of corn per day. The box was kept locked. At the end of the month, the turkey was killed in the presence of several gentlemen, was large and heavy, and on being opened was found filled with fat. Nothing, on dissection, was found in the gizzard and entrails but charcoal and brick. Last winter the experiment was repeated, and with the same success.

Several years since, in fitting out one of the Liverpool traders at New York, a pig on board was missing, and was supposed to have been lost. The cargo was taken on board, stowed, and the vessel sailed. It was now discovered that the pig was alive in the coal hole, but as he could not be got at readily, it was concluded to leave him to his fate. He remained in this retreat until the passage was made, when his pigship was found to be not only alive and well, but materially improved in condition, though there was nothing, coal excepted, he could have swallowed.

When it is remembered that wood, sugar, and several other substances, some of which are most nutritive, are compounded of nearly the same original elements, it would seem possible, by animal chemistry, to convert them to the purpose of sustaining life; though all experiments with wood or charcoal have failed. The German chemists have converted wood into very palatable bread, by roasting and pulverizing; but calcination, it has been supposed, would destroy whatever powers of nutrition wood might originally contain. The chemical action of vegetables seems unable to produce the least effect on coal, and not the least particle of it has ever been found in the structure of vegetables, though mixed with the earth and water in which the plants are growing, in the form of the most impalpable powder. Whether animal chemistry is able to do what vegetable organization cannot, remains to be seen; though if there is no mistake in the statements alluded to, it would seem probable that this intractable substance, is, in some way made subservient to the nutrition of animals.—*Genesee Farmer.*

How to make agricultural pursuits pleasant as well as profitable.—For ages the employment of the husbandman has been looked upon as dull, uninteresting work. It has been thought to be a dull, plodding occupation of the hands and not of the head. And there has been too much foundation for such an impression. The agriculturists of years not long by-gone, did little with the head to dignify or enliven the work of the hands. A change for the better seems now near at hand. Perhaps in your day, farmers may be generally more intellectual, more intelligent, and more able to bring the truths of science to benefit them in their manual labors, and to give them interest and delight in their occupations. But whatever others do, I hope you at least will take such measures as will convince yourself, if not others, that agricultural employments are as interesting, intellectual, and pleasing pursuits as any with which they may be put in comparison. I know of no method by which you can more effectually render them so than by employing your mind upon your work. Most assuredly the more your mind is employed upon your work—in tracing effects to their causes, in accounting for failure and disappointment, in understanding the operations of nature, in devising improvements, &c.—the more interest you will take in your employments and the pleasure and gratification you will derive from them. Moreover this is not only the way to make your pursuits pleasant, but it is the way to make them profitable also. Your mental operations must be wrong-sided and injudicious indeed if they do not lead you to the discovery of means whereby you can educe more produce out of any certain amount of labor and expenditure. The most intelligent farmers, you may easily convince yourself, if industry is not wanting, generally succeed in making their farms the most profitable. But what I wish especially to inculcate upon you, at this time, is, that you will feel more interest, more pleasure, more conscious dignity in your pursuits, the more you occupy your mind on the subject.

Agricultural schools would aid in thus elevating agriculture.—*Albany Cultivator.*

THE VALUE OF OBSERVATION TO THE FARMER.

Perhaps to no man or class of men is the value of observation so great as to the farmer. His business is principally with natural objects. His occupation leads him in many things to imitate or follow nature. But the laws of nature are learned only by watching the silent processes and the silent operations which are going on, and thus ascertaining the causes which produce the effects which we see taking place around us. The man who watches closest—who suffers no change to take place without looking into the cause—who, in fine, observes the most, and treasures up the most in his memory, becomes most acquainted with the laws before spoken of, and by consequence is the best farmer. Although the observations which have been made and recorded by others, have become a large fund of valuable information, there is yet a vast deal more to learn. Facts are yet in the dark which can only be elicited by observation.

It would be interesting to have a history of many of the useful improvements that have been made from slight observations, which first gave the hint to set the experiment on foot. Mrs Child gives a pleasing statement of the value of observation in one instance.—A farmer not fifty miles from Boston, says she, is quite famous for the improvement he has made in the wild grape. He found a vine in the wood which dozens of his neighbors passed every week, as well as he; but he *observed* that where the oxen fed upon the vine the grapes were largest and sweetest. He took the hint. The vine was transplanted and closely pruned. This produced the same effect as browsing had done; the nourishment, that in a wild state supported a great weight of vines and tendrils, went entirely to the body of the grape. His neighbors would have known this as well as he, if they had thought about it; but they did not *observe*.

It is by thus observing that we are enabled to gather experience, and experience guides to future success. The observations that have been made in regard to the grain worm, or *weevil* as the insect is sometimes called, led many farmers to sow their wheat late. By so doing they have saved their crops. It had been observed that the insect came out at a certain time of the summer and remained active a certain number of days. Hence by sowing the wheat later so that it should not be headed out, it would escape the ravages of the insect in question. This has succeeded well with most farmers.

A farmer who will probaby have 500 bushels of good wheat, told us, the other day, that had he sowed it ten days earlier, as he intended to, he would have lost the whole. But being informed of the observations that had been made in regard to the weevil, and advised to suspend operations ten days, he complied and thus saved his crop.

Hens will, it is said, be sure to furnish an extra quantity of eggs, if you deal to each about a gill of oats per day.

From the Genesee Farmer.

TREE PLANTING.

A correspondent in Hannibal asks for some information on the subject of planting forest trees; the most valuable kinds; the best methods of growing them, &c. &c. Mr R. will find in the former volumes of the Farmer several papers on the rearing of forest trees; but as the subject is one of great interest, and very many of our present subscribers have not seen the former volumes, we shall give some general principles in as condensed a form as possible, confident that a large proportion of our readers will find it for their interest to cultivate and plant trees to a greater or less extent.

The objects in planting trees are various, and the end to be gained should be kept steadily in view in all the operations. Trees are wanted for timber, fruit, fence, fuel, and for ornament; and the planting must be conducted with reference to these things. For timber, the oak and the elm are the most valuable; for fences, if rails are wanted, the chestnut will give the quickest and most durable growth; if wood for posts is desired, the locust or mulberry are probably as good as can be found; the several kinds of maple or walnut make good fuel; and for ornament there are none superior to the locust or maple, both of which are valuable in other respects. Evergreens have not as yet been grown in this country to any extent; but it is probable the planting of pines, larches, spruce, and fir trees, in locations suitable for their growth, would be advisable.

Observation shows that different trees demand soils of different and peculiar qualities; some flourishing best on dry and some on wet land; some on clayey and some on gravelly soils; and others on soils in which the component parts are so mixed as to give a good farming soil or loam. The oak and the chestnut will grow well on the same soil, though examination shows that the soil in which the latter comes to the greatest perfection is more sandy, or contains more siliceous matter, than that in which the oak reaches a similar state. So the pine will grow with the chestnut or oak; but to attain its greatest size, requires a soil a little different from either It is remarkable, that some trees that flourish in the very lightest soils, will also grow in the densest swamps. Thus, the pine is not unfrequently found by the side of the cypress, while it cannot be made to grow on lands that are hard and clayey, though dry and elevated. Soils the most suitable for the oak and chestnut, are not the best for the maple or elm, the last of which, with the ash, flourish well together, the black ash excepted, which will grow nowhere except in swamps, or rather swales. It is only by ascertaining the nature of the soil we wish to plant, that we can determine the kind of tree most suitable for propagation, and this any farmer, who is an observer of the soils on which the several kinds of trees naturally and vigorously grow, can decide, without the aid of any chemical or mechanical analysis whatever. It would be absurd to plant the white oak in a morass by the side of the cypress, or the chestnut in a stiff clay, or hard-pan bottom, with the maple or elm; and the locust and mulberry require a loose gravelly soil, or the trees will be weak and the wood inferior.

The preparation of any soil for planting trees is simple and plain. It must be made deep, and loose, and rich. If the nursery ground on which the seeds are to be sown is unlike that in which the trees are to stand, or which is proper for them, it should be brought by artificial means as near that state as possible. Thus, if too heavy, it must be trenched or drained; if not friable, deep ploughing or spading must be resorted to; if containing too much clay, gravel or sand may be added; and if not rich enough, or deficient in vegetable matter, manure or mould must be added till it is of the quality desired. If the plants are to be raised from seeds, no matter what the kind may be, the earth must be made fine previously to sowing, and the plants must be regularly hoed free from weeds. Top dressings of compost forked in between the rows will keep the land in good heart, and greatly accelerate their growth. In these respects, the treatment of fruit and forest trees does not essentially differ.

The time of planting the seeds from which the trees are to be grown, is usually the spring of the year, and always as early as the ground can be prepared for their reception. There can be no doubt, that in most cases, if the seeds could be preserved against worms, mice, &c. during the winter, it would be better to plant them in the fall of the year, as they are greatly aided in germinating by the action of the frost. The seeds of trees require but a shallow covering, merely enough to keep them from the air; as those that fall upon the earth, and are scarcely buried, if not otherwise disturbed, rarely fail of growing. The oak, walnut, chestnut, &c. are examples of this. Three years since we allowed the butternuts that fell from a tree growing in a grass plat, to lie where they fell. They were undisturbed through the winter, and when the grass was fit for mowing, the young trees occupied the whole ground. They were allowed to stand; and the next year, we transplanted from that spot to a nursery, more than five hundred trees, nearly all of which are now living and vigorous. All seeds, nuts, acorns, &c. intended for planting, should be carefully kept from heating, by being spread after gathering, and kept cool and dry until wanted for putting into the earth. Some have advised putting seeds in sand and preserving them dry and from the air in this way; and if the sand is pure and dry, it may answer, but if there is any dampness, the seeds will sprout or mould, and be rendered unfit for planting.

The maple, elm, and ash, are usually grown in this country from plants transplanted from the woods, as they can generally be found in sufficient numbers, particularly where lands have been partially cleared, and then by being enclosed, suffered to grow up again to timber. They may, all of them, however, be grown from the seed, sown in beds, and then transplanted to nurseries for cultivation, till their final transplantation. Where oak or chestnut lands are found, there is no difficulty in perpetuating these trees, as they spring up from the roots of the trees that are cut down, or from seeds already in the earth. Nothing more is required than to keep such lands fenced, until the young timber is beyond the reach of cattle or sheep. On what are called beach, and maple, and elm timbered lands, we frequently hear complaints that no young timber grows up: and the naked state of such woodlands proves the necessity of devising some way of growing young timber to take the place of that which decays by age, or is cut out for timber, fuel, or other purposes. Nothing is wanted for this but to keep the woodlands enclosed, so that no animals shall be allowed to feed in them. If the seeds that vegetate are allowed to grow, there will be no want of young trees in any of our woodlands; if cattle or sheep can have access to them, they will certainly be browsed down and destroyed. Let those who wish to grow young timber in their woodlands, (and all who have not a large supply should do this,) pay attention to this, and they will in a few years find their grounds fully occupied.

There is some difficulty in taking trees from woodlands, and putting them in cleared lands; but if proper precautions are adopted in the removal, such as taking as many of the fine roots, and as much earth as can be made to adhere, they will generally succeed. Trees may be transplanted in the spring or fall, as best suits the convenience of the farmer. They will succeed any time after the year's growth of wood is completed, and before the next summer's growth begins. Evergreens will best bear transplanting later in the season. A variety of experiments seem to prove, that they will do better as late as June than earlier in the season. As such trees, growing in woodlands, have usually but few fine roots, the custom has been adopted in Europe, and tried with success here, of cutting around the young tree at the distance of two or three feet, a year or two before removal, in such a way as to divide all the principal surface roots, and thus cause the formation of a great quantity of fine and vigorous roots near the body. The tree is then lifted from the earth, without disturbing the earth on the roots, and is transplanted in perfect safety and certainty of growing.

As in the propagation of the stones producing fruit trees, such as the cherry, plum, and peach, the seeds germinate with more certainty after freezing, particularly in our latitudes; the stones should be planted in the fall of the year, and but slightly covered with earth, that this preliminary process may be ensured. In some instances where it was not convenient to plant in the fall, the benefits of freezing have been gained, by mixing them up with wet earth in a proper vessel, and having them frozen through the winter in that state. The danger of being destroyed by vermin may be thus avoided, and if put into properly prepared ground in the spring before germination commences, they vegetate with about equal certainty.

MILK SICKNESS.

A gentleman at the west has announced, that he has discovered the cause and the cure of this formidable disease, which has been so destructive in some parts of the western states, and has, in some few instances, destroyed or driven the inhabitants from some of the most fertile sections of the country. He is claiming considerable sums from the state legislatures for the promulgation of his specific, and should there be no humbuggery about it, he will certainly be entitled to a handsome reward, in those states where the losses from this cause have already been so great.

There are no traces of a similar disease in any other part of the world; and in the United States it has been principally confined to Tennessee, Kentucky, Ohio, Indiana, and Illinois, though it is believed some few instances have occurred in Wisconsin, and west of the Mississippi. A multitude of speculations have been made as to the probable cause of this fatal complaint, both among medical men and others; and there is scarcely a poisonous mineral or plant to which it has not in turn been attributed. Public opinion at the west seems to have settled on the opinion, that it was produced by

a low shrub or vine assuming at times the form of a climber, and bearing bunches of brown berries. Whatever the poison may be, it causes cattle to quiver, stagger, and die within a few hours. If cows eat of it, the milk is poisoned, the butter is also poisoned, and those who partake of either, are as surely injured, as if they had partaken of the original cause itself. The slightest symptoms are vomiting, and this more severe as the quantity of poison is greater, until violent spasms and death ensues. Dogs and wolves who feed on animals that have died with this disease share the same fate, and to prevent the extending of the evil to dogs and swine, cattle that die with the poison are buried carefully to avoid such results.

In districts where the disease prevails, great care is necessary in killing beef animals, as sometimes the beef will produce vomiting, when the animal is so little affected as to escape notice. To test the presence of the disease, some butchers are in the habit of driving the animal a mile to heat its blood; when if it is poisoned it will exhibit that peculiar trembling so certainly indicative of the presence of the complaint.

In remarking on the formidable nature of this complaint, a writer from the west says,—

"I have seen many farms with comfortable buildings and improvements, entirely abandoned, and their owners fled to other quarters, to avoid this dreadful curse."

But perhaps the most signal instance of its fatality is given in the following extract of a paper from Col. Hinde of Illinois, who has given much attention to the topic:

"Calling to see a friend on Darby Creek, Ohio, whom I had not seen for twenty years, he pointed to his wife and remarked—'She is my third wife; I am her third husband; and in yon grave yard lie fifteen members of our families taken off by that dreadful disease, the puking complaint!'"

Surely there must be some unusual fascinations in any place that would lead an individual for so many years to encounter so fatal an enemy to life. Should the announcement of the discovery alluded to, prove well founded, it will be a valuable boon to the west, and save annually great numbers of cattle and many valuable lives.—*Genesee Farmer.*

From the Farmer's Monthly Visitor.

CULTURE OF RUTA BAGA.

Hon. Isaac Hill—Dear Sir—Believing ruta baga to be of great value to the stock farmers, and as the season for sowing is at hand, I send you an extract from my farm journal, relative to my mode of culture the first year, though, as it was my first experiment, I am far from thinking it to be the best mode. However, as I was pretty accurate in detail, its publication may be of use to my brother farmers, by inducing some one better acquainted with its culture than myself, to point out the errors in my process.

In the fall of 1836, I broke up three acres of green-sward; the soil a stiff loam, upon which I carted 150 single loads of coarse manure, and in 1837 planted with potatoes, there being nothing peculiar in the management, or extraordinary in the crop.

In the spring of 1838, I carted on sixty loads of well rotted manure, which I ploughed in, so soon as the ground was sufficiently dry, and on the 27th of May I again ploughed, harrowed, and after rolling smooth, marked it into squares of eighteen inches, and planted by dropping two or three seeds in each intersection, which was done by taking the seed from a box, with a single hole in the top. I sowed from the 1st to the 4th of June; on the 23d began to weed, thinning out where the plants were too crowded, and setting out where deficient, which I continued to do occasionally when other work did not press, till the 28th July. On the 26th October, I began to pull and cut, finishing on the 9th of November; and I found the plants last pulled as uninjured as the first, although they had been exposed to several severe frosts. They were pulled by hand, the workmen striking two plants together to shake off the dirt, and then throwing them down, where they lay spread for three hours to dry the loose dirt that still adhered to them; the tops were then twisted off, and the plants thrown into heaps for carting, so that each root was handled three several times. They might have been got into the cart with less labor, but my object was to get them into the cellar in a tolerably clean state. Having heard much of the difficulty of keeping them in cellars, from their tendency to rot, I stored in one cellar 1,500 bushels without injury to a single root, and I have now, (May 5,) more than 100 bushels as full and as fair as when first placed there. The cellar was thirty feet square, on the bottom of which, eight inch timbers were placed, and covered with plank two inches apart. The whole was divided into two bins, with one foot space between the bins, and one foot between the bins and the cellar wall; the sides of the bins being made with narrow boards, with a space of four inches between each board.

I fed out my twelve hundred bushels to my sheep, six hundred to my horned cattle, and the remainder to my horses. They all ate with avidity, preferring them to potatoes. For my horses and cattle they were merely cut with a spade; for the sheep, they were passed through a vegetable cutter. They were carted in two carts, each containing thirty baskets holding more than a bushel, and weighing seventyfour pounds. The number of baskets was twentyone hundred, and the whole weight *seventyseven tons.* Number of roots, 36,000—as put in the extract from my journal alluded to above. I am, sir, very respectfully, your ob't servant, LEONARD JARVIS.

Ruta Baga,		*Dr.*
To interest on three acres, at $100 per acre,		$18
Twice ploughing three acres,		6
Harrowing and rolling,		4
Seed,		2
To 130 days' work on above, viz. 9 days sowing, 85 weeding, hoeing and setting, and 36 drying and cutting—130 days, or five months, at $13 per month,		65
To 22 week's board, at 9s. per week,		33
		$128
Cr.		
By 2,100 bushels at 10 cents,	$210	
Profit, estimating at 10 cents,		82
Claremont, May 5, 1839.		$210

Remarks.—Compared with the price of other crops, this ruta baga was richly worth twenty cents the bushel: say it was worth only fifteen cents, the nett profits on these three acres of ground were *one hundred amd eightyseven dollars.*

We are highly pleased to exhibit this evidence from one of the first, and we believe the most extensive practical farmer in the state of New Hampshire, in favor of the root culture. He shows by this experiment what much manure will do for a succession of years: it gives double payment in a single year for the labor bestowed; and this double payment will extend itself into a series of from four to ten years, according to the capacity for retention of the soil to which it is applied.—*Ed. Far. Mon. Vis.*

EGGS.

Almost every body loves good fresh eggs, and with or without glasses or silver spoons, can contrive to eat them; whether boiled or fried, raw or roasted, made into custard with sugar and spices, or swallowed gently with a bordering of old port, they agree with the palate and the stomach, and neatly laid out with fair slices of bacon, they form a repast within the reach of all, and to be despised by none. But though most farmers keep fowls, and *raise* their own eggs, there are many who have not yet learned the difference there is in the richness and flavor of eggs produced by fat and well fed hens, and those from birds that have been half starved through our winters. There will be some difference in the size, but far more in the quality. The yolk of one will be large, fine colored, and of good consistence, and the albumen or white, clear and pure; while the contents of the other will be watery and meagre, as though there was not vitality or substance enough in the parent fowl to properly carry out and complete the work that nature had sketched. In order to have good eggs, the hens should be well fed, and also provided during the months they are unable to come at the ground, with a box of earth containing an abundance of fine gravel, (if of limestone so much the better,) that they may be able to grind and prepare for digestion the food they receive. Fowls form no small item in the profits of the small farmer, and few creatures better repay the care and attention they receive. Of eggs, those of the domestic hen are decidedly the best; but those of both ducks and geese may be used for some of the purposes of domestic cookery. Eggs can be kept any length of time, if the air is perfectly excluded, and the place of deposite kept at a low temperature.—*Genesee Farmer.*

As our cotemporary teaches us how to *make* good eggs, we beg to reciprocate the favor, by advising him how to *cook* them. To be nutritious and healthful, and to suit most palates, the yolk of an egg should be cooked hard, and the white should be cooked to a jelly, the consistence of a custard. This is best accomplished neither by boiling, frying nor roasting—but by caudling, that is, by turning upon it scalding water, either in a caudler or other close dish. In this way eggs may be properly cooked; and by repeating the hot water, or leaving them to lay in it a longer or shorter time, they may be easily graduated to the liking of every one, without trouble or waste.—*Cultivator.*

Sun-flower Seed—Cure for Founder.—"The seeds of sun-flower," says a correspondent of the the Zanesville Gazette, "are of the best remedies known for the cure of founder in horses. Immediately on discovering that your horse is foundered, mix about a pint of the whole seed in his feed and it will give a perfect cure." The seed should be given as soon as it is discovered that the horse is foundered.

NEW ENGLAND FARMER,
AND HORTICULTURAL REGISTER.

BOSTON, WEDNESDAY, SEPTEMBER 11, 1839.

NOTICES OF FARMS, MINUTES BY THE WAY, &c.

VISIT TO DEDHAM.

A ride in the railroad cars gives the traveller but a glimpse of the country through which he passes; yet he may see enough to convince him, that whatever has been done by the way of agricultural improvements in times past, there is still enough to be done, to busy the next generation as well as the present in renovating old worn out fields, reclaiming unprofitable meadows and swamps, building stone-walls, setting out fruit-trees, rearing forests for timber, wood, &c.

As we leave Boston for Dedham, on the railroad, the eye is busy in viewing the receding city, the villages of Roxbury, Cambridge and Charlestown, or the beautiful cultivated hills of Brookline and Brighton, which fill up the circle of splendid scenery, and the passenger is hardly aware that he is passing over a marshy, watery waste of a mile and a half or two miles, fit for neither city or country. He soon finds himself gliding through gardens and cultivated fields, and crossing over highways; every moment the scene changes, and presents some new object to view. The most prominent country-seat which appears to the traveller after gaining the open country, is that of Benjamin Bussey, Esq. Roxbury, which is situated on elevated ground, and at a proper distance from the railroad to be viewed to advantage. The grounds about it are highly decorated with evergreens and other trees; but what strikes the eye of the agriculturist with most pleasure is the large extent of highly cultivated meadows and uplands, which are spread out before and around it. We hope at some other time to be able to give a particular account of his place, as he has done much by the way of converting his waste swampy ground, as well as his uplands, into a state highly productive; and although he has arrived at a very advanced age (past fourscore), he still carries on his improvements with the vigor of youth.

We noticed as we passed along, many tracts of unprofitable waste meadow land, which might without much difficulty be drained, and subdued and made to produce abundant crops. By the railroad we see the poorest part of the country; it gives the traveller an erroneous opinion of our improvements in farming and gardening. To form a proper estimate, the route should be by the old road over Jamaica Plains. Two miles from Dedham, we exchange steam for horse power, and pass over a portion of what is called "low plains," famous in times past for division musters. We see here an extensive plain, that has probably been cultivated nearly two centuries, which, by a constant cropping, has become rather barren, producing generally miserable crops unless an extra quantity of manure is applied; in which case a fair return is realized. By ploughing in green crops, we think this land might be much improved; but the trouble of it is, with some of our people, if they sow a field down with buck-wheat or clover for that purpose, and it looks promising, they conclude to make the most of it, and save their scanty crop, which should be given to the soil when in bloom. They probably come to the conclusion that they may not live another year to realize the benefit their land might derive from the operation; and so they go on from year to year, taking what they can get from their lands, without adding enough to furnish sufficient food for the plants. The consequence is, their lands are impoverished, and produce little or nothing. As well might we expect to get fat hogs upon half feed, or a full quota of work from the laborer with short allowance, as to get successive crops without manure. A young man, an acquaintance of ours, called in the spring for a few bushels of buckwheat to sow. He said he had considerable plain land, which formerly produced good corn, rye, and other crops, but that it was now pretty much run out, and gave but little feed for his cattle, which he pastured on them; he thought he would plough up a piece of it and sow buck-wheat, in the expectation of getting a fair crop. We asked him why he did not try the experiment of ploughing in a few sowings of buckwheat, and see if he could not bring up his land a little. "O," says he, "I can't do that; I must get a crop from it this year." This is as far ahead as some of our farmers look; they will not enter upon a course of cultivation, which may take from three to seven years to bring to maturity. No; they are satisfied only with the operation which will bring an immediate return. The idea of adding to the value and strength of the soil seems not to enter into their plans.

Horticulture has received a good share of attention in the village of Dedham, and we see efforts made by many of its inhabitants to stock their gardens with good fruits. We called upon Mr E. M. Richards, a worthy member of the Horticultural Society, and to whom they are indebted for his weekly contributions. It always gives us pleasure to see a good collection of fruit, and we think highly of that individual who furnishes his family and friends, at all seasons of the year, with a succession of the most delicious; his example is manifest in the gardens of his neighbors—for a person hates to be excelled by his neighbor, even though it may be nothing more than in the excellence of his fruit, and where one man leads the way others will follow. How many luxuries of our own production we may have continually at hand, if we choose, and yet it is provoking to think, that with a climate and soil unrivalled for most of the fruits of the temperate zone, there are so many who have time and land enough and to spare, that "can't afford" (it is an ugly expression we know) to have anything more than winter apples, and perhaps these of inferior sorts, for the use of their household.

There is, however, a growing desire manifest in the public generally, for the cultivation of choice fruit, if we may judge from the increased demand for trees. Mr Richards has taken unwearied pains to obtain a choice collection. He has had to encounter a great difficulty in the natural poverty of the soil, which, like most of the soil in the village, is thin and light, upon a sandy, and, in some places, gravelly bottom, and very unfavorable for most fruits. He has many varieties of Apples, Pears, Peaches, Plums, &c. It is not the bearing year for his apple trees, and his crop will be small; his pear and peach were loaded with fruit. We noticed a number of pears on quince stocks, which we would not advise the cultivation of for standard trees; they may answer well enough for garden walls, but in the open ground they never succeed well; the tops grow too heavy for the bottoms, and are easily blown over, and though they produce fruit earlier than those on pear stocks, are not so durable.

Mr Ebenezer Wight has taken great pains to procure a fine breed of hogs. We called to give them a look. He has some fine Berkshires, from C. N. Bement, of Albany, which are pure blood, and some crosses from E. Phinney, of Lexington, and others of his own raising, about thirty in number. He resides, himself, in the city, and visits his place only once a week, yet, under the care of a boy about 14 years of age, his hogs looked in fine condition. We are much pleased with the Berkshire breed, and think they are a great improvement over the hogs generally raised by our farmers. Mr Wight has done considerable by the way of setting out fruit trees for a few years past, most of which were in a flourishing condition. He is very particular to preserve the name of each tree, the time it was set out, and the place from which it came; for this purpose he has a book in which the location of every tree is noted, the nursery from which the tree was taken, what year set out, the name of the fruit, with remarks upon the quality of the fruit, &c.; or, if an old tree grafted, the year it was performed and the source from which the scions were obtained. We thought this an excellent plan when a large number of trees are planted.

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NOTICE OF E. L. PENNIMAN'S FARM, RIVER DALE, DEDHAM.

In noticing this farm we shall be very brief, as in the first place we made but a hasty visit, and secondly Mr Penniman has but just commenced operations. If life is spared, we shall take pleasure to record at some future period his improvements, which, from the energy he has commenced with, bid fair to be of no ordinary kind. He has lately left the city and purchased his farm containing about one hundred acres; it is pleasantly situated on Charles river, one mile from the village, somewhat secluded, on what is called "the island," and affords some of the finest river scenery imaginable. He has given it the appropriate name of "River Dale." Like a good farmer, he commenced operations, not quite a year since, by making a geological survey of his premises, and was rewarded by the discovery of two valuable mines, viz: one of fine granite, where stones of almost any description may be got out for underpinning, door-step, &c.; very valuable in this place as there is a deficiency of good granite for building. Secondly, a valuable mine of meadow manure, of which there is an inexhaustible supply. It is strange, that although this farm has been cultivated probably from the first settlement of the town, this treasure has remained undisturbed. This, when worked over by his hogs, will produce wonders upon the farm. He has made a fine road from the public highway to his own house, a distance of about half a mile, partly through low miry ground, set out many trees, commenced in good earnest in cultivating root crops, built a commodious house and barn, &c.

But what at present is most attracting is his fine Berkshire hogs, which we were politely asked to step into the pens to see: as we had neither silk stockings nor morocco shoes upon our feet, we cheerfully accepted the invitation, and soon had his pigs by the ear. This breed are remarkably quiet and docile, and exhibit symptoms of much satisfaction in the attention bestowed upon them. We were shown a litter of full-bloods which would make

pretty pets, and much more desirable to fondle than some of the lady's lap-dogs. They were three weeks old, and about all engaged at $12 each. He has a fine large Berkshire boar and sow, from C. N. Bement, with full-bloods of his own raising, and some mixed. He has forty or fifty hogs on his place. He has one fine boar, crossed with the Hallam breed, for sale; a noble animal, and worthy the attention of purchasers. His principal object in raising swine, was the making of manure. He has probably learned the Flemish maxim that, "without manure there is no corn—without cattle there is no manure—and without green crops and roots cattle cannot be kept." We think, however, he will kill two birds with one stone, for while his hogs make manure, they will also yield him a handsome profit. J. B.

SUGAR BEET.

The valuable qualities of this root for feeding animals is beginning to be better understood; and we may reasonably expect that its culture will hereafter be much increased. The common beet and the mangel wurtzel, have both been proved valuable roots, but the sugar beet is much superior to either of the former, as was indeed to have been expected from the greater quantity of saccharine matter it contains. It is cultivated with as much ease and certainty as the common beet, and though usually more difficulty has been found in preserving the beet or the carrot, than the ruta baga, there is really no more danger of failure where cellars of proper temperature are to be had. For making fine mutton, the sugar beet is said to be unrivalled. We find a letter on this subject in the Whip, from which we make the following extract, which we are confident is worthy the attention of all those who wish to produce from their flocks meat of the first quality. The writer was an extensive mutton grower for the Philadelphia market, and his mutton, before he commenced using the sugar beet, had obtained a high character; at last he commenced the use of this root, and as he says,—

"What surprised him most, was the rapid manner in which they took on fat, when fed on the sugar beet; and when carried to market the saddles excited particular attention, from their very superior appearance. But it was not in appearance only; the meat was of a much better quality, more juicy, and exceedingly tender. The inquiry was—Why, sir, on what do you fatten your sheep?—and when I replied, on the sugar beet, hay, and a small portion of corn, it would generally call forth exclamations of surprise. My first trial was four years since, and since that time I have been a constant grower of the beet. The meat I bring to market is always in demand, and brings several cents more per pound, than that fattened in the old way; and yet, strange to say, some of my neighbors, though I have often urged them, will not plant the beet for their stock. I have been benefitted to the extent of several hundred dollars by the introduction of this root—the effects are visible—my neighbors see it, and know it—and yet they stand lookers on, halting between two opinions. But light is breaking in upon us, and of one thing you may be assured, that is, that the time is not far distant *when every extensive stock feeder will also be an extensive root grower.*"

The opinion here last advanced is doubtless a correct one; and we also think, that, whether feeders or not, every cattle grower will, if he consults his own interest, be a root grower. We are convinced, that in this country, as elsewhere, the root culture lies at the basis of all profitable cattle husbandry.—*Genesee Farmer.*

From the Cultivator.

EFFICACY OF LIME IN PREVENTING INSECT DEPREDATIONS, &c.

Mr. Buel—Sir—Although not a tiller of the soil, I have lately become a subscriber to your valuable paper, and feel a disposition to perform what little may be in my power, to increase the stock of agricultural knowledge, and to stimulate to renewed exertions those who are practically engaged in this all important, though still too much neglected source of national wealth and greatness. In the Cultivator for May, page 57, I observed a communication, which stated among other things, that a piece of corn on ground where fragments of wall, &c, had been strewn for manure, was exempt from the ravages of worms. This recalled to my recollection some facts which were communicated to me in conversation some years ago, by an intelligent old gentleman, who was for many years a farmer in Columbia, county in this state, and which were in substance as follows:—He once applied what he supposed at the time was plaster, or gypsum, but which was afterwards ascertained to be lime, to a number of hills of corn, potatoes, cucumbers, melons, &c. It was applied at the time of planting, about a handful being thrown directly over the seeds in each hill, previous to their being covered with with earth. He remarked that the corn to which this application had been made, was entirely exempt from worms, while other pieces of corn in the vicinity suffered severely from their depredations. The cucumber and melon vines, &c. were also exempt from their attacks, neither were they troubled by the striped bugs or flies, with which they are generally molested. The gentleman assured me, that he had afterwards repeated this experiment a number of times, and always with a like satisfactory result. It would seem from this, that lime is to a great extent a preventive of the ravages of the grub and other insects, when applied at or previous to the time of planting. The mode practised by my informant, may not answer for all soils and situations, but the same result might probably be attained by throwing the lime mixed with the earth over the surface, and ploughing or harrowing it under previous to planting.

A short time since, at the house of a friend, while overlooking a volume of the Cultivator, (for 1835,) I noticed a communication in which hydraulic or water lime, (some account of which was given in a recent number,) is highly recommended as a paint for fences, out-buildings, &c. The writer asserts that it is more durable and much superior in all respects to common lime. With the exception of stating that he mixed it with skim milk, he gives scarcely any directions respecting the proper manner of applying it. I shall be pleased if some of your correspondents, who have used the water lime for such purposes, will communicate the result of their experience, and if favorable, state the best method of mixing and preparing it, &c.

There are in my garden, some young gooseberry bushes, which have been well manured and pruned, but the fruit, since they commenced bearing, (about three years ago,) has been uniformly *rusty*, as it is commonly termed. To prevent this, I have tried several remedies without success. Last year, seeing salt dissolved in water somewhere recommended, I had it sprinkled over the bushes several times, commencing when they were in blossom, but without effect. I have also tried lime, (recommended I believe in the Cultivator.) Last fall, it was applied freely about the roots, and the branches whitewashed as thoroughly as practicable, and a small quantity mixed with water was sprinkled over the bushes two or three times this spring. This experiment answered no better than the other. It would be a source of gratification to me, and doubtless also to many other persons, to be informed of any effectual remedy for this disease, which may be known to you or any of your numerous correspondents. Respectfully yours, E.

New Utrecht, L. I., July 18, 1839.

Remark.—We have cultivated the gooseberry eighteen years—during sixteen of which, we lost most or all of the crop by mildew or rust;—but the last two years the fruit has been fine, clear and healthy. We impute the recent exemption to the application of brine (salt and water) to the ground about the bushes in the month of February, which we have done two years. We consider the mildew a vegetable parasite, which abides permanently upon the collar and root of the bush, and from which seeds are disseminated, under a suitable state of atmosphere, in summer to the fruit; and that the application of salt, when vegetation is dormant, destroys the parasite without hurting the bush. Pickle may be used in the growing season, at the rate of one ounce of salt to one gallon of water. In winter it may be much stronger.—*Cond.*

Soap Suds a Specific for Nourishing Flowers.—A fair correspondent writes to us from Newton Stewart, in the following terms:—"Recently I happened to gather a beautiful pansey, and when tired of admiring it, tossed the toy aside, which partly, by accident, fell into a box full of soap suds. The said pansey had neither joint nor root, and you may judge of my surprise when, at the end of a day or two, I found it growing. From this time forward I watched it narrowly, and now find it, after the lapse of a fortnight, a goodly plant with several buds on it. Thinking water might produce the same effect, I placed a newly cropped pansey in an element, which, pure in itself is the medium of purity in everything else; but it withered and died on so spare a diet. By way of confirming the first experiment, I have since placed a slip of a rose tree and a pink in suds, and both are flourishing in great vigor in my dressing room. Should this accidental discovery prove useful to florists, it will afford sincere pleasure to your correspondent."—*Dumfries Courier.*

It may gratify some of your agricultural readers to be made acquainted with the consumption of the city of Paris in the following articles:

During the month of May, 1839, the Paris Journal states there were consumed 6328 oxen, 1286 cows, 7614 calves, 35730 sheep, and 517,965 kilogrammes of tallow (about 2 lbs. to a kilogramme.) This was an increase over the consumption of May, 1838, of 1073 oxen, 809 calves, 1966 sheep, and 7343 kilogrammes of tallow, and a decrease of 488 cows. This considerable general increase is in part attributed to the great number of strangers attracted to the capital by the exhibition of arts and manufactures, independent of the usual influx of visitors at this time of the year.—*Comm.*

MISCELLANEOUS.

THE STORMY PETEREL.

BY MARY HOWITT.

O stormy, stormy Peterel,
Come, rest thee, bird, awhile;
There is no storm believe me,
Anigh this summer isle.

Come, rest thy waving pinions:
Alight thee down by me,
And tell me somewhat of the lore
Thou learnest on the sea.

Dost hear beneath the ocean,
The gathering tempest form?
See'st thou afar the little cloud
That grows into the storm?

How is it in the billowy depth?
Doth sea-weed heave and swell?
And is a sound of coming wo
Rung from each cavern'd shell?

Dost watch the stormy sunset
In tempests of the west,
And see the old moon riding slow,
With the new moon on her breast?

Dost mark the billows heaving
Before the coming gale,
And scream for joy of every sound
That turns the seaman pale?

Are gusty tempests mirth to thee?
Lovest thou the lightning's flash?
The booming of the mountain wave—
The thunder's deafening crash?

O stormy, stormy Peterel!
Thou art a bird of wo!
Yet, would I thou could'st tell me half
Of the misery thou dost know.

There was a ship went down last night,
A good ship and a fair;
A costly freight within her lay,
And many a soul was there!

The night-black storm was o'er her;
And 'neath the cavern'd wave,
In all her strength she perished,
Nor skill of man could save.

The cry of her great agony
Went upward to the sky;
She perished in her strength and pride,
Nor human aid was nigh.

But thou, O stormy Peterel,
Went'st screaming o'er the foam;
Are there no tidings from that ship,
Which thou canst carry home?

Yes! He who raised the tempest up,
Sustained each dropping one:
And God was present in the storm,
Though human aid was none!

BONE MANURE.

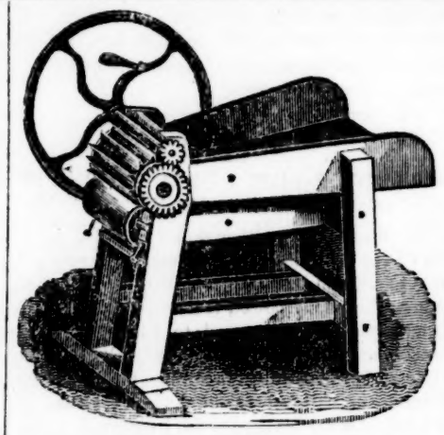
The subscriber informs his friends and the public, that, after ten years experience, he is fully convinced that ground bones form the most powerful stimulant that can be applied to the earth as a manure.

He keeps constantly on hand a supply of Ground Bone, and solicits the patronage of the agricultural community. Price at the Mill 35 cents per bushel; put up in casks and delivered at any part of the city at 40 cents per bushel, and no charge for casks or carting.

Also, ground Oyster Shells.

Orders left at the Bone Mill, near Tremont road, in Roxbury, at the New England Agricultural Warehouse and Seed Store, No. 52 North Market Street, or through the Post Office will receive prompt attention.

March 27. NAHUM WARD.



GREEN'S PATENT STRAW CUTTER.

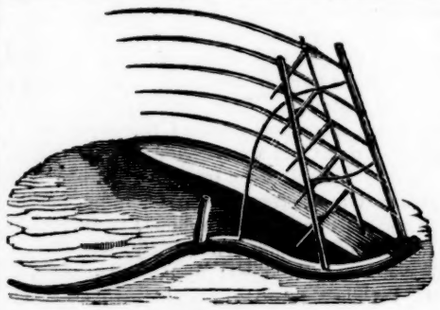
JOSEPH BRECK & CO. at the New England Agricultural Warehouse and Seed Store, Nos. 51 and 52 North Market Street, have for sale, Green's Patent Straw, Hay and Stalk Cutter, operating on a mechanical principle not before applied to any implement for this purpose. The most prominent effects of this application, and some of the consequent peculiarities of the machine are:

1. So great a reduction of the quantum of power requisite to use it, that the strength of a half grown boy is sufficient to work it very efficiently.

2. With even this moderate power, it easily cuts two bushels a minute, which is full twice as fast as has been claimed by any other machine even when worked by horse or steam power.

3. The knives, owing to the peculiar manner in whichthey cut, require sharpening less often than those of any other straw cutter.

4. The machine is simple in its construction, made and put together very stronagly. It is therefore not so liable as the complicated machines in general use to get out of order.



GRAIN CRADLES.

The Grain Cradle is an article which is coming into very general use in the New England States, where they were till of late but little known, although they have been in very general use in the southern and western States, for many years, and which is found to be decidedly the best mode of harvesting grain, as it is supposed one man will cradle five acres in a day when he cannot reap more than one. For sale by JOSEPH BRECK & CO., 51 & 52 North Market Street.

July 10.

AGRICULTURAL AGENCY.

The subscriber having been removed from the Post Office, by the pleasure of the President, and left for the present without any means of support, has consented to resume the editorship of the "American Farmer," which he originally established, and the first periodical in America dedicated to the cause of Agriculture—That resource, though "better than nothing," being altogether inadequate, as an additional means of livelihood, he has formed with his son, Theodoric Bland Skinner, a partnership to conduct an AGRICULTURAL AGENCY for the sale of real estate, and for the sale and purchase of domestic animals, horses, cattle, sheep and hogs, especially of improved breed, Agricultural machinery and implements, seed grain, garden and field seed, and for sale of patent rights, *Morus Multicaulis Trees*, &c. He will only add, that they will strictly guard the interests of their employers;—and that through them no humbuggery shall be practised knowingly. Address, postage paid, to

Baltumore, August, 1839. J. S. SKINNER.

MECHANICS' FAIR.

AT QUINCY HALL, BOSTON, SEPTEMBER 23, 1839.

The public are reminded that the Second Exhibition of of the Massachusetts Charitable Mechanic Association, for the encouragement of Manufactures and the Mechanic Arts, will be opened in Quincy Hall, on Monday, September 23, 1839.

Mechanics, Artisans, and Manufacturers, who intend to offer articles for Premium or Exhibition, are particularly requested to give notice to the Secretary or Superintendent, at as early a day as convenient, specifying the articles intended to be offered.

Contributors are also reminded that all articles intended for Exhibition must be delivered to the Superintendent, WILLIAM WASHBURN, at Quincy Hall, on or previous to WEDNESDAY, September 18, accompanied by an invoice, and a *particular description* of all new and important inventions, or improvements in the articles offered.

Steam Power will be furnished to put in operation all Machinery, and the Superintendent will take particular charge of all Models offered for this purpose.

Competent Judges will be selected to view all articles presented. Premiums will be awarded to those deemed most worthy of that distinction.

Articles may be offered by Apprentices, who will have a division specially appropriated for their productions.

Tickets of admission will be furnished to all contributors.

GEO. DARRACOTT, President.

J. G. ROGERS, Secretary.
WM. WASHBURN, Superintendent.

August 28.

Complete Garden and Horticultural Tool Chests,

From Sheffield, England; containing Garden Shears, improved Pruning Shears and Scissors, Pruning and Grafting Knives, Flower Gatherer, Garden, Dutch and Triangular Hoes, Saw, Spud, Weeding Hook, Garden Rake, Trowel Hammer and Garden Reel; comprising every useful implement necessary for the cultivation of the Flower Garden. For sale at the New England Agricultural Warehouse, No. 51 and 52 North Market Street.

WINTER RYE.

Just received at the New England Agricultural Warehouse and Seed Store, a supply of prime Winter Rye for sowing. JOSEPH BRECK & CO.

August 14.

STRAWBERRIES.

Those who are desirous of cultivating this delicious fruit are respectfully informed that the subscriber has succeeded, after a number of years experimenting upon the *Strawberry*, not only in obtaining *new varieties*, but in ascertaining the best method of cultivation.

Specimens of the fruits grown in his *Garden* have been exhibited at the *Massachusetts Horticulturul Society Rooms* the *four past years*, and are also too well known in *Faneuil Hall Market* to need a particular notice here.

He has for sale at his *Garden* in *Brighton*, Mass., the following *eight varieties* of *Plants*. They are of superior stock and quality, all *warranted* to be truly named and free from the *mixtures* often found in those offered for sale promiscuously.

Those who are in want of Strawberry Plants, are respectfully invited, and they will find it interesting, to call at the *Garden* and see the *manner* of cultivation. The method of cultivation, and any information desired will be cheerfully given.

The subscriber would state that from many years *personal experience*, he is satisfied that plantations of these vines made the last of July or early in August, by careful and constant attention will produce nearly or quite as much fruit the season following as those plantations made in the Spring will produce the second year.

Warren's Seedling Methven.—A new and valuable kind. A free bearer, fruit very large and juicy; fruit measuring four and a half inches have been exhibited the present season.

Methven Castle.—Fruit extremely large, high flavored, and showy. Specimens of this kind have been exhibited at the Horticultural Rooms for two years past, measuring five and a half inches in circumference.

Bath Scarlet.—Fruit large, full bearer, and beautiful scarlet.

Early Virginia.—This is considered the earliest fruit—a free bearer, hardy, and very early; decidedly *a fine kind for market.*

Royal Scarlet —Fruit long oval shaped and juicy.

Hautbois.—Fruit smaller but very numerous.

English Wood.—Fruit well known.

Monthly.—Fruit is gathered from the vines from June to October, and in good quantity and fine quality.

☞ Orders left at the *Garden*, or directed to the subscriber, *Brighton, Mass.*, or left at Messrs J. Breck & Co's Agricultural Warehouse, Boston, will be carefully and promptly attended to, and all PLANTS will be carefully packed and forwarded agreeably to directions.

JAMES L. L. F. WARREN.

Nonantum Vale, Brighton, Mass. July 17. is8w